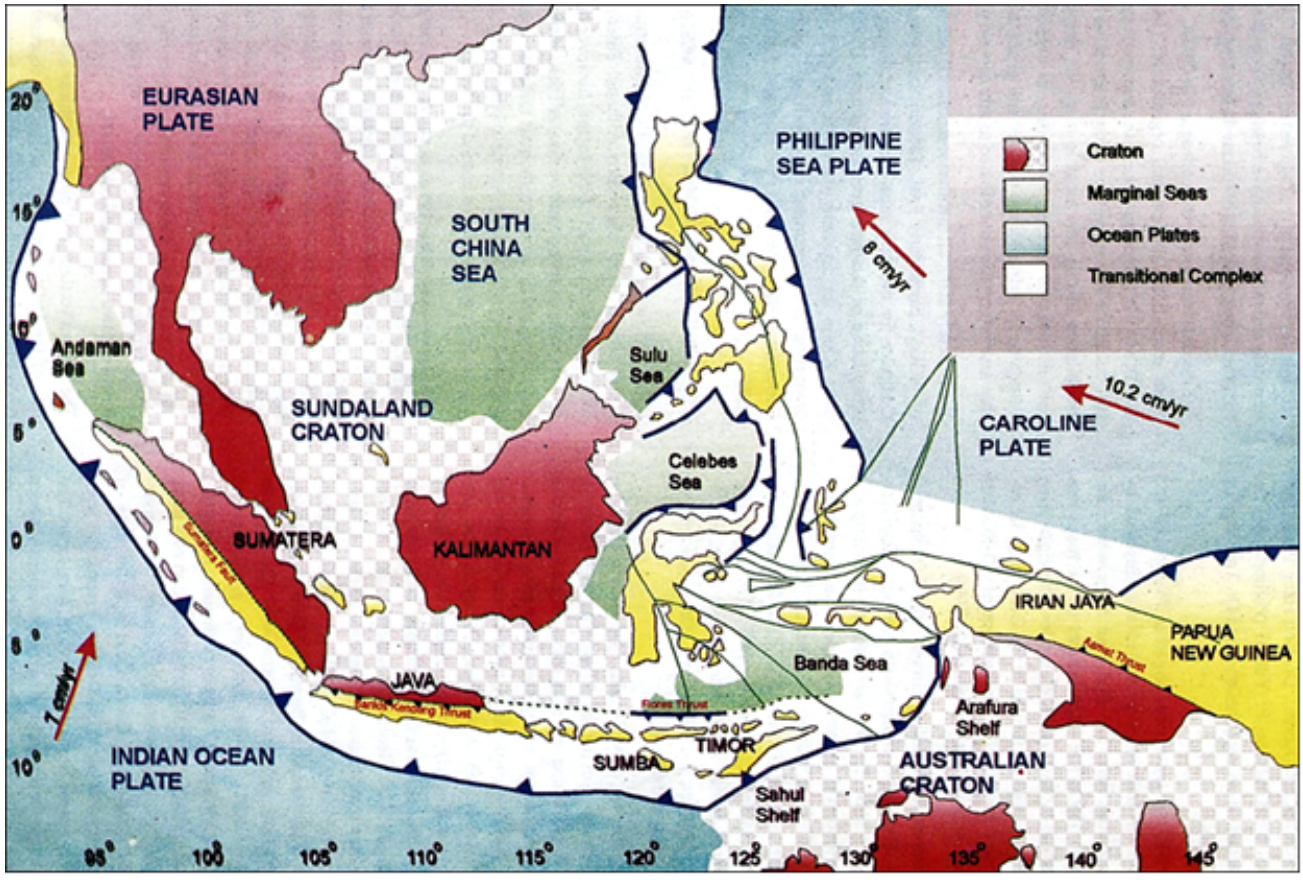
BIBLIOGRAPHY OF THE GEOLOGY OF INDONESIA AND SURROUNDING AREAS

Edition 8.0, February 2026

J.T. VAN GORSEL

I. REGIONAL GEOLOGY



(Simandjuntak, 2000)

I. REGIONAL GEOLOGY

I.1. INDONESIA REGIONAL GEOLOGY 38
I.1. Indonesia Regional Geology 38
I.2. SE ASIA REGIONAL 161
I.2. SE Asia Regional Geology, Tectonics, Gondwanan-Tethyan regional paleo(bio)geography 161
I.3. QUATERNARY VOLCANISM- INDONESIA 256
IX.1. Quaternary Volcanism: General and Outside Java 256
IX.2. Quaternary Volcanism: Java (incl. Krakatau) 316
I.4. INDONESIA- SE ASIA: MODERN ENVIRONMENTS, CARBONATES 395
X.1. Quaternary/Recent deposits and environments- shallow: Deltas, Tsunami deposits, Climate 395
X.2. Quaternary/Recent deposits and environments- deep: Oceanography, Indonesian Throughflow 420
I.5. INDONESIA- SE ASIA CARBONATES, CORAL REEFS 446
1.5. SE Asia- Modern carbonate environments, Coral Reefs, Cenozoic carbonates 446

Chapter I of the Bibliography 8.0 contains 480 pages with >3560 titles of papers on the regional geology of Indonesia and adjacent SE Asia- Pacific, as well as general papers that do not fit in any of the regions or specialist categories that are listed separately. It is subdivided in five chapters, I.1- 1.5.

I.1. and I.2. Indonesia and SE Asia Regional Geology

Chapters I.1 and I.2 include >1530 references of textbooks and papers on the regional geology and tectonics of Indonesia and SE Asia. Chapter I.1 focuses on the regional geology of Indonesia, while chapter I.2 includes more of the regional geology of the broader SE Asia region and of the SE Asia mainland (Malaysia, Thailand, Myanmar, Vietnam, SW China, etc.). The reason for including the latter in this Indonesia-focused bibliography is that many of the geological zones of mainland SE Asia continue into parts of western Indonesia, so the tectonic history and stratigraphy of these areas are relevant to understanding parts of Sumatra, Borneo, etc..

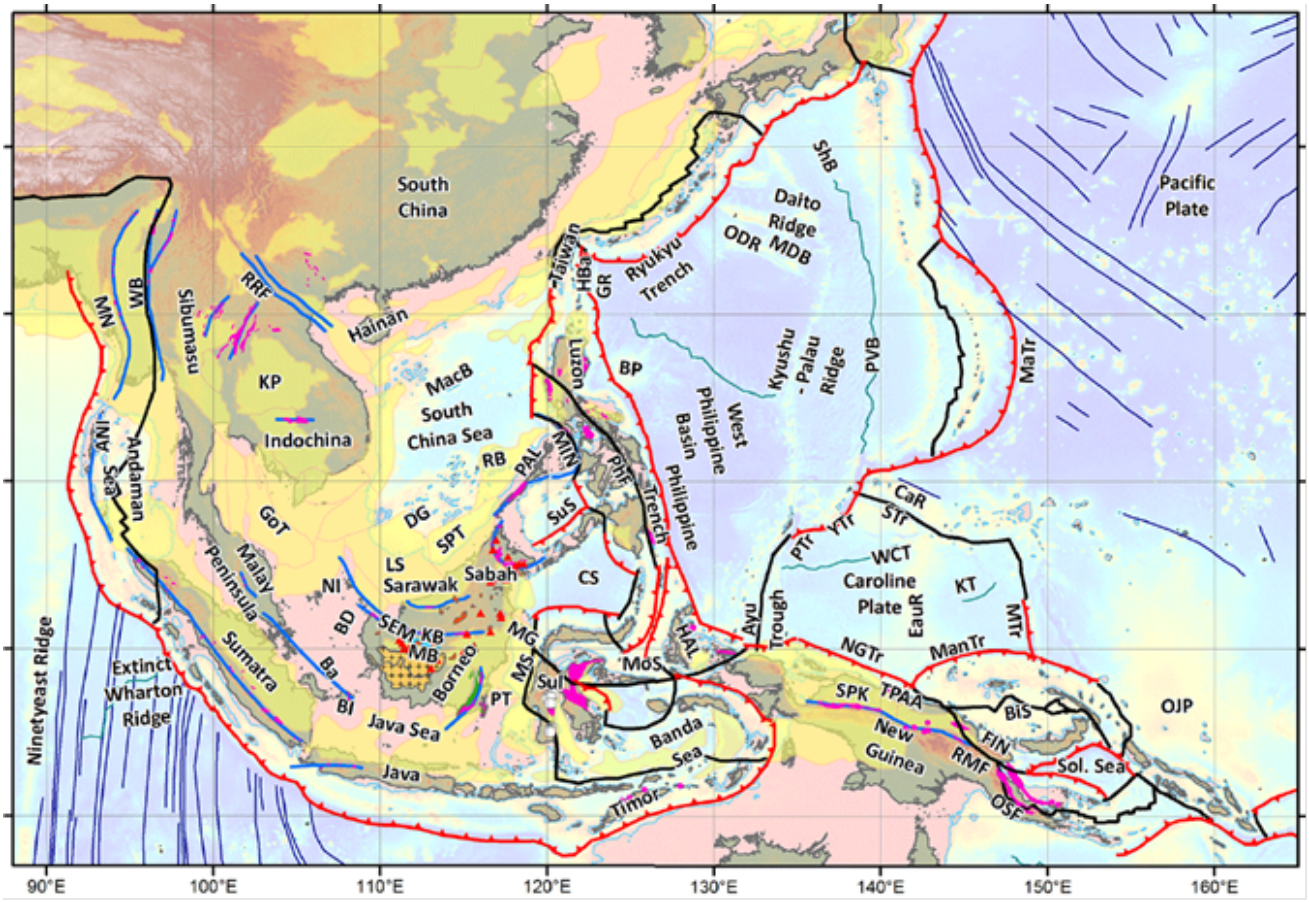


Figure I.1.1. Present-day subduction zones, oceanic basins and major ophiolites in the SE Asia- New Guinea- West Pacific region (Zahirovic at al. 2014).

Numerous papers on Paleozoic- Mesozoic faunas and floras are also included here, especially those that help identify faunal and floral provinces that are indicative of paleoclimate and latitudinal positions of plates through time. Paleobiogeographic patterns and tectonostratigraphic successions are key tools for underpinning and constraining plate reconstructions of SE Asia, especially in the pre-Cenozoic.
Although the Van Bemmelen (1949) Geology of Indonesia book is generally viewed as the most significant textbook on the geology of Indonesia, its tectonic interpretations are outdated (and were actually already controversial at the time of publication).

The pioneering book and maps of Warren Hamilton (1979) *'Tectonics of the Indonesian Region*' (U.S. Geol. Survey Prof. Paper 1078) were the first interpretations of Indonesia tectonics in a plate tectonic framework and remains an unrivalled masterpiece. The book still contains some of the most comprehensive descriptions of the geology of Indonesia, and many of Hamilton's interpretations have withstood the tests of time.

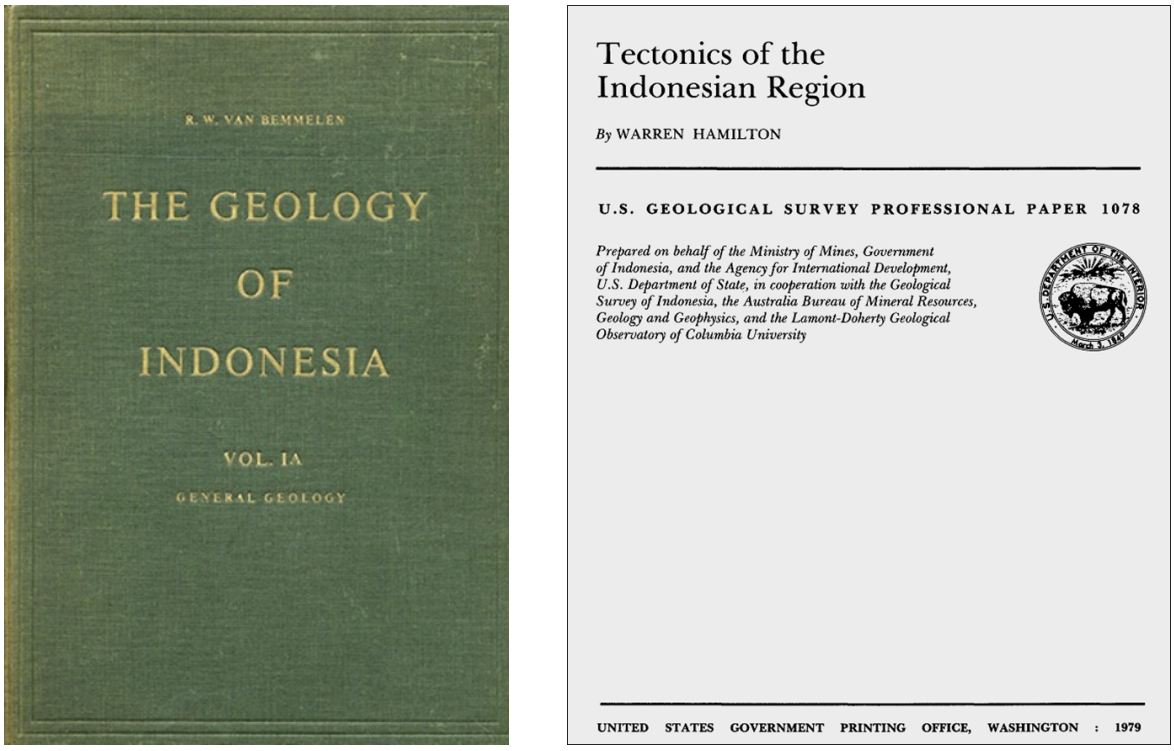


Figure I.1.2. Two key textbooks on the geology of the indonesian region.

The main patterns of the geologic evolution of SE Asia are reasonably well understood, but many details and exact timing of events are still debated.

Indonesia/ SE Asia Basement blocks, suture zones

The area of the Indonesian archipelago and surrounding SE Asia- Australia/ New Guinea is a very complex mosaic of continental and microcontinental blocks, active and extinct volcanic arcs and associated subduction complexes (commonly with ophiolites, marking suture zones where former ocean basins were consumed) and old and young oceans and marginal ocean basins (Figure I.1.3)

The patterns of Pretertiary Basement are masked and complicated by later evens, like the formation of widespread Tertiary basins (mainly since Middle-Late Eocene time), breakup of margins by marginal basins creation, metamorphism due to magmatic activity, offsets by several large strike slip fault zones, etc.

Mainland SE Asia is also a complex collage of continental blocks, all of which probably once part of the Gondwana supercontinent, but separated from the NW Australia- New Guinea margin during successive episodes of Devonian- Jurassic rifting and seafloor spreading (S China, Indochina, Sibumasu, W Burma, etc.).

After Northward drift from the S Hemisphere to equatorial latitudes (recorded by changes in flora and fauna from colder to warmer climates), the various Gondwanan-origin blocks amalgamated with mainland Eurasia during multiple Late Paleozoic- Eocene episodes of collision.

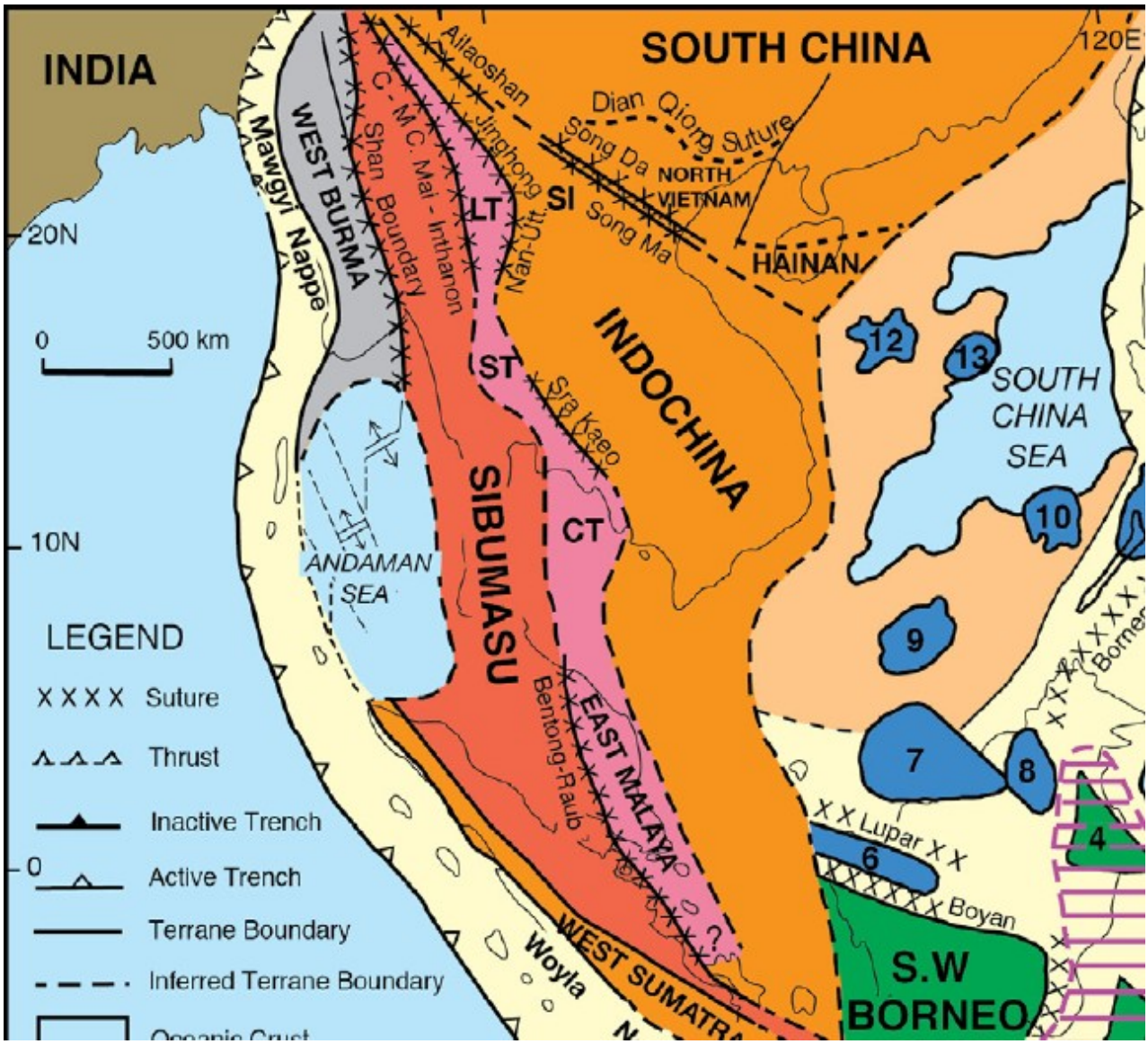


Figure I.1.3. Recent interpretation of SE Asia- Indonesia basement terranes. It differs from earlier versions mainly in recognition of West Sumatra, SW Borneo and Semitau blocks as separate units from the Sibumasu-East Malaya- Indochina blocks that amalgamated to form the Sundaland core in Triassic time (Metcalfe 2013).

Multiple suture zones that separate continental blocks or continental and and arc volcanic terranes have been recognized across SE Asia. Most of these sutures represent former subduction zones along the South Eurasia and West Pacific margins, and many contain ophiolitic rocks that represent remnants of upper mantle, oceanic crust and pelagic sediment cover of closed former ocean basins (Paleo-Tethys, Meso-Tethys, Neo-Tethys/ Indian Ocean). These are accompanied by volcanic-plutonic arc systems and intensely deformed accretionary complexes.

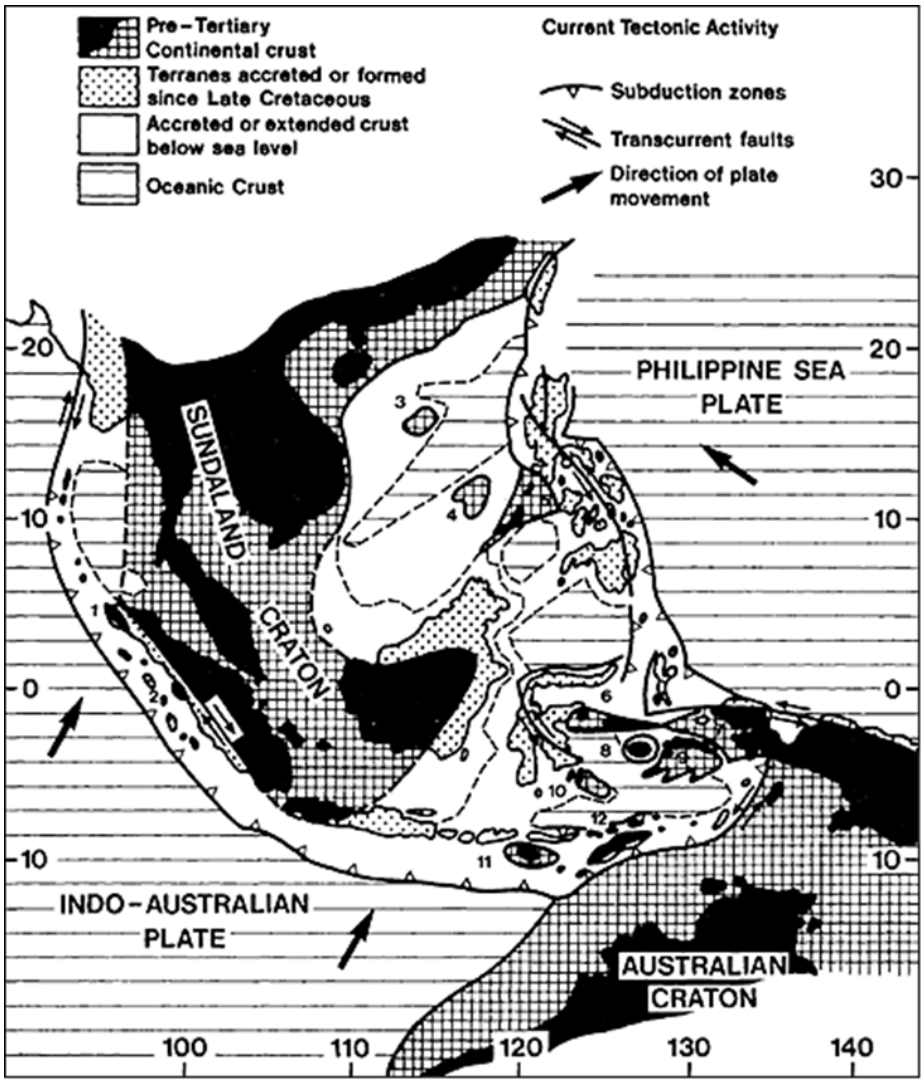


Figure I.1.4. Tectonic setting of Indonesia between two major Pretertiary continental blocks (Sundaland/ Eurasia and Australia- New Guinea) (Barber 1985).

Figure I.1.4. summarizes the main tectonic elements of the greater Indonesian region:

1. Two major, converging Pretertiary continental blocks: Sundaland/ Eurasia in the NW and Australia- New Guinea in the SE;
2. Cretaceous and younger accretionary crust along the Sundaland and New Guinea margins (including the Woyla terranes of West Sumatra, East Java, Meratus Range and further East in East Kalimantan, West Sulawesi, all of North Borneo;
3. Cenozoic oceanic marginal basins (South China Sea, Sulu Sea, Celebes Sea (possibly including North Makassar Straits) and North and South Banda Seas)
4. Microcontinental blocks that rifted off both Sundaland (Palawan (4) , Sumba (11), Timor allochthon (12));
5. Microcontinental blocks that rifted off Australia- New Guinea (Banggai-Sula (6), Seram-Buru (9), etc.)
6. Major oceanic plates: northward subducting Indian Ocean in the SW and the westward subducting Pacific Ocean/ Philippine SeaPlate in the NE.

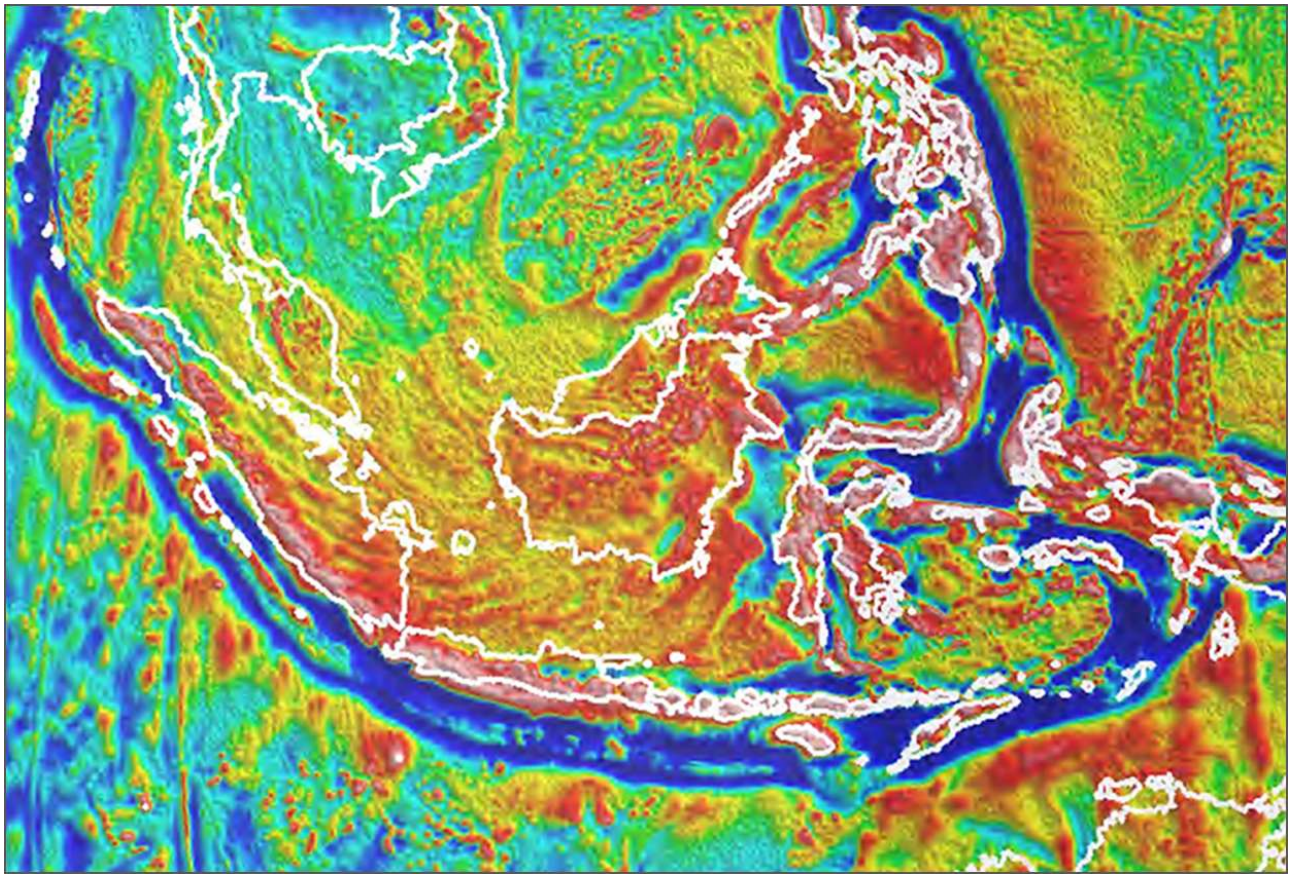


Figure I.1.5. Free Air gravity of the Indonesian region. Blue= low gravity= areas of downgoing plates (trenches-accretionary prisms. (SEATIGER Brochure 2009) .

Western Indonesia ('Sundaland') is a complex of Late Paleozoic- Triassic continental blocks that amalgamated by the closing of the Paleotethys Ocean suture in Late Triassic time. After a long period of relative quiescence Sundaland was affected by widespread Middle Eocene- Early Miocene rifting, creating many hydrocarbon-bearing sedimentary basins (e.g. Hutchison 1984, 1986, Hall and. Morley, 2004, Sunarjanto et al. 2008, Pubellier and Morley 2014, Rangin 2015).

The present-day configuration of Eastern Indonesia formed much later, and is still evolving. It is a collage of relatively small continental microplates derived from the Australia- New Guinea Gondwanan margin, remnants of extinct volcanic arcs, active volcanic arcs and Cenozoic oceanic marginal basins.

Marginal basins and 'sliver terranes'

Today the ~7400 km long East Asian/ West Pacific active margin is an area of extensive marginal oceanic basins, from North of Japan to SE Asia (Tamaki and Honza 1991). They formed by back-arc extension, presumably during rollback of the subducting Pacific Ocean slab(s), collapsing and hyperextending the overriding plate towards the retreating hinge line.

In several examples the extension and spreading appeared to have initiated by 'splitting' of an active magmatic arc system. If this arc was in an active continental margin setting, this process will remove the entire forearc area from the continental margin, which then becomes an isolated continental sliver terrane (e.g. Palawan, West Sulawesi, Sumba- Timor Banda Terrane, Sulu Ridge, Sinta Ridge, etc.)

The majority (possibly all) of the known Indonesian marginal basins has already been reduced in area by subduction along one or more of their margins. Older marginal basins may already have been consumed completely ('Proto- South China Sea?).

Marginal basins may be flanked by zones of rifted continental or accretionary crust with sedimentary basins, formed during the same rollback/ extensional episodes (e.g. 400-800 km wide rifted zones along the South China Sea; Clift et al. 2002).

Cenozoic marginal basins in and around Indonesia, with ages of oceanic crust formation, are shown on Figure I.1.6. They include:

- South China Sea ~32-15 Ma *(Barckhausen and Roeser 2004, Song and Li 2015, Sibuet et al. 2016)*;
- Sulu Sea ~18-15 Ma (late Early Miocene) *(Lewis 1991, Hutchison 1992, 2005)*;
- Celebes Sea- Makassar Straits: ~48-35 Ma (M-L Eocene) *(Rangin et al. 1989, Gaina and Muller 2007)*;
- North Banda Sea ~13-7 Ma (Middle- Late Miocene) *(Hinschberger et al. 2000)*
- South Banda Sea 6.5- 3.5 Ma (latest Miocene- Early Pliocene) *(Hinschberger et al. 2001)*;
- Moluccas Sea Eocene? (seafloor now already mostly subducted).

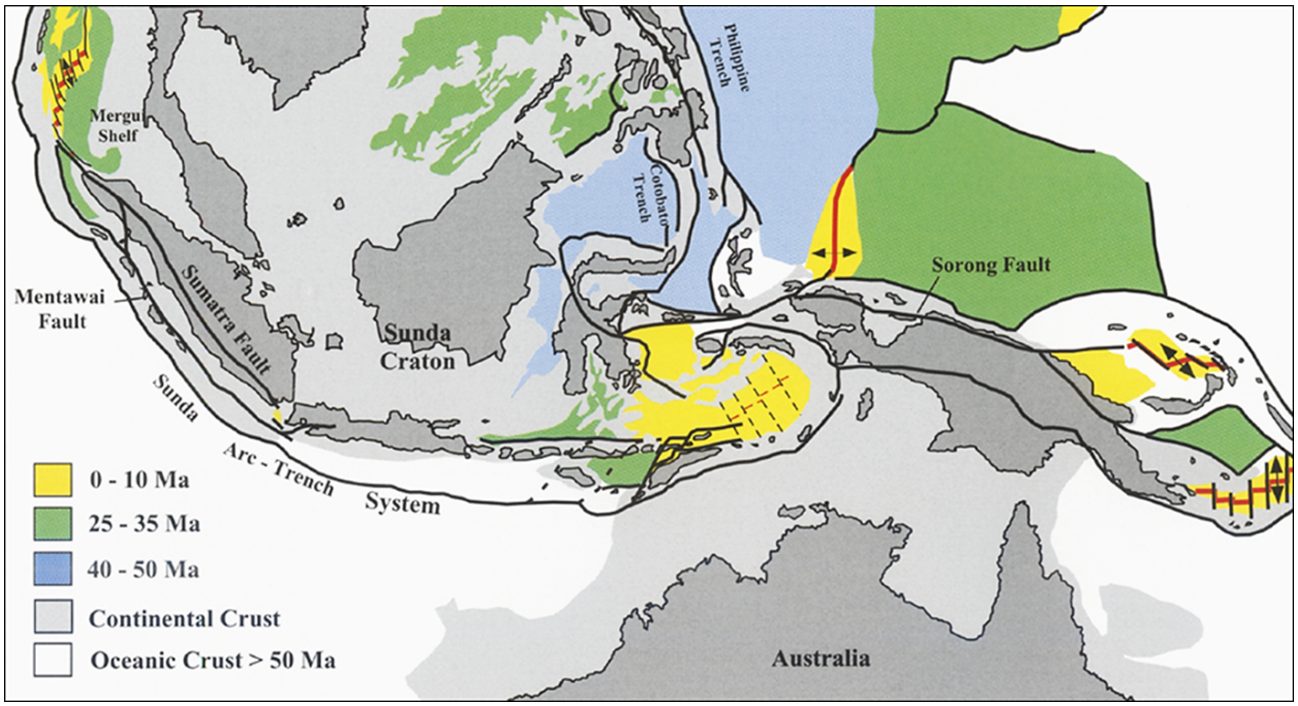


Figure I.1.6. marginal oceanic basins in the Indonesia- New Guinea region and their ages (Harris, 2003). The Sulu Sea shown here as Oligocene is more likely of Miocene age, the South China Sea seafloor spreading was in Late Oligocene- Early Miocene.

Tectonic models of the Indonesian region

Numerous authors have attempted syntheses of geologic and tectonic evolution of the Indonesian Archipelago, dating back to the 1800's. (Earle 1845, Volz 1912, Elbert 1913, Abendanon 1914, 1915, etc.). (Figure I.1.7). Unfortunately all of the pre-1970's tectonics models should now be viewed as largely obsolete, and mainly of historic interest, although many of these models were driven by perfectly valid geological observations.

Many of the earliest tectonic theories proposed for Indonesia/ SE Asia were reviewed in Blom 1934 and Umbgrove (1934, 1938) and Katili (1971). Umbgrove (1938) lamented that *'in the last decades at least one or two new hypotheses have been suggested every year to explain the structure of the East Indian Archipelago*'. Despite Umbgrove's lament, this trend has continued until today, and new models continue to be published every year (see Plate reconstructions chapter below).

Many of the early 1900's discussions on tectonics of the Indonesian Archipelago involved geosynclines or discussed the merits of Wegener's theory of continental drift, a concept that had been around since 1915, but was not generally accepted until around 1968.

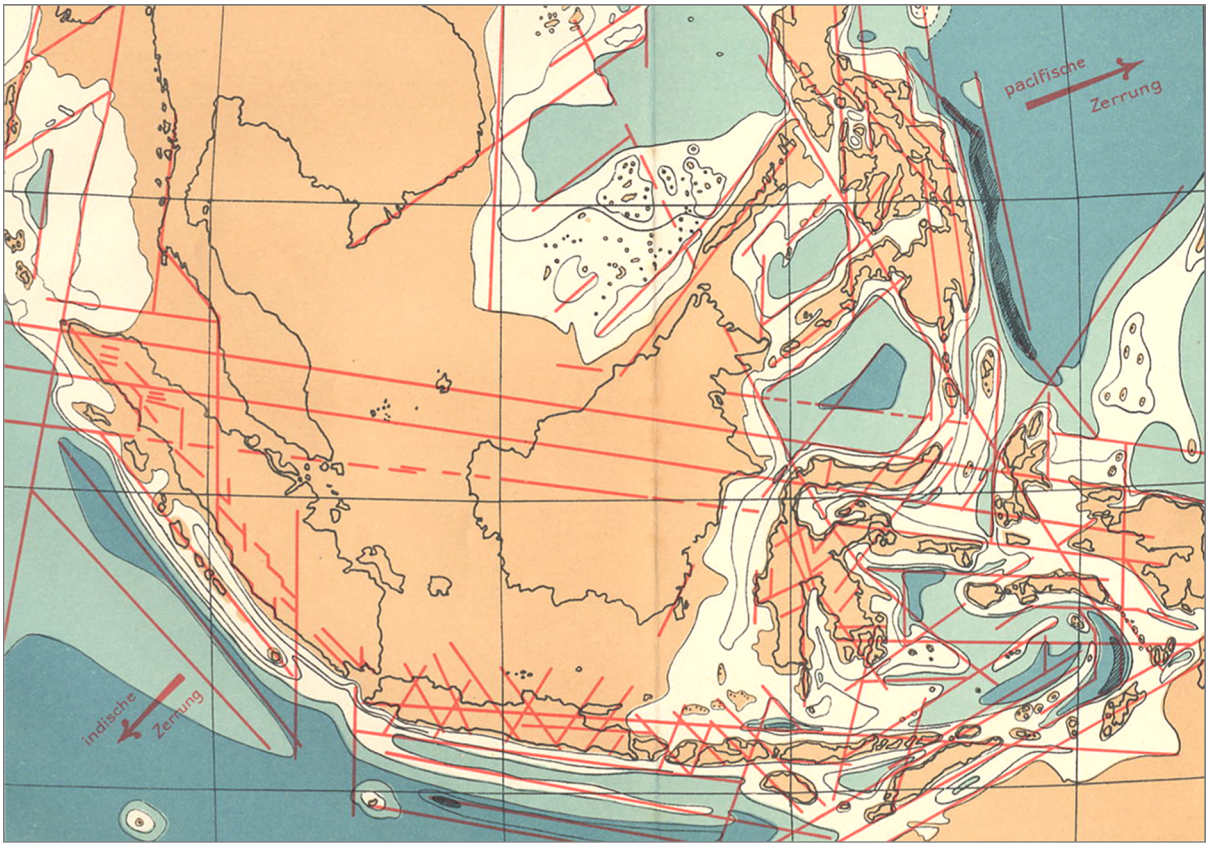


Figure I.1.7. Example of old tectonic model for Indonesia (Volz, 1912). The suggested regional fault patterns have little or no basis in reality.

Many of the European geologists working in the Indonesian region in the 1920's- 1930's were early 'mobilists', believing in Wegener's then-controversial model of horizontal plate movements. and recognizing the Indonesian region as an area between the converging Asian and Australian continents, as initially suggested by Wegener himself in 1915, 1922 (Wing Easton 1921, Brouwer, Molengraaff, Van Waterschoot Van der Gracht (1928), Smit Sibinga 1927, 1933; Figure I.1.8), Escher (1933), etc.). However, other prominent Dutch structural geologists of that era (Umbgrove 1935, Van Bemmelen 1933, 1949, etc., and Kuenen 1950) were skeptics of continental drift.

Mention should be made here of the theories of the 'grand master' of the geology of Indonesia, R.W. van Bemmelen. He oppposed continental drift and later also plate tectonics, until his death in 1983. Instead he proposed his 'undation theory' in 1932, which he continued to promote this, with some modifications, until 1978. This theory explained all tectonics as the result of vertical, mantle-driven uplifts, followed by lateral gravitational sliding of the cover of uplifted 'undations'. This theory never found much acceptance in the geological world.

For more details on the history of Wegener's and Van Bemmelen's theories in the 'Netherlands Indies' see Barzilay (2008, 2009, 2010).

Many newer tectonic models have been proposed since the 'Pre-Plate tectonics era', and new models continue to be proposed and debated today. Whilst these are all valuable exercises in integrating large amounts of geologic data, the long-term 'success rate' of any (plate-)tectonic modles of the Indonesia/ SE Asia region has not been very high, although elements of many of them continue to be accepted.

But much progress has been made, especially after the advent of plate tectonics theory and plate reconstruction models since the 1970's. But parts of Indonesia's geology and tectonic history remain poorly understood and subject to continued debates, so it is unlikely we have reached a 'final answer' today.

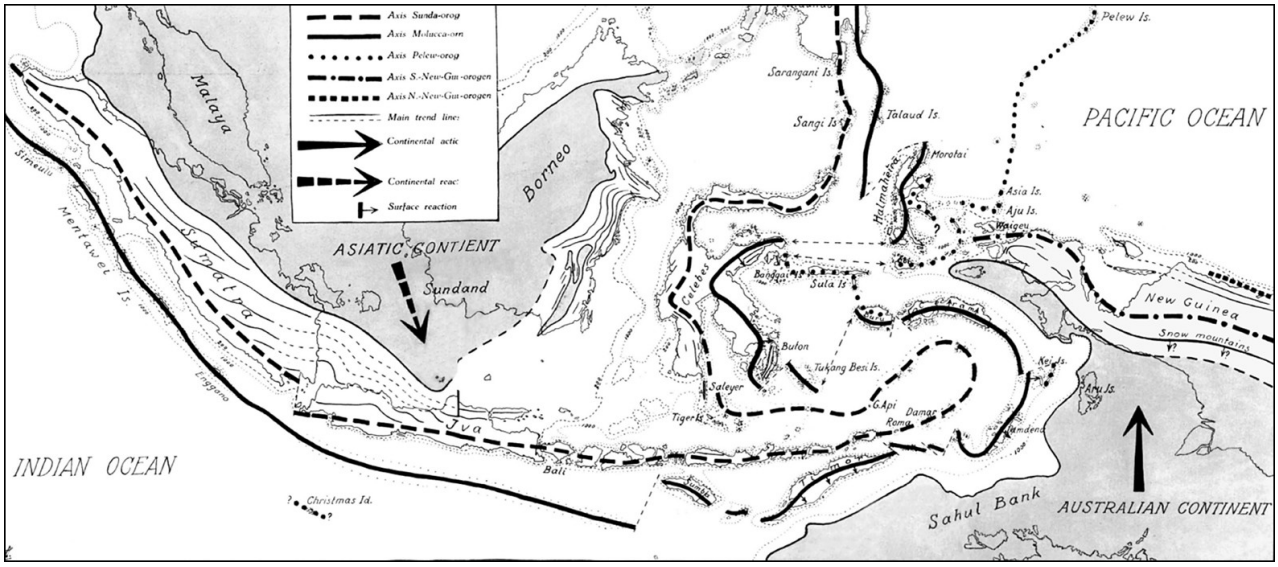


Figure I.1.8. Early depiction of orogenic belts in the Indonesian region, and 'Wegener style' suggestion of converging Asian and Australian continents (Smit Sibinga 1933).

Current tectonic models agree on the convergence of the three major tectonic plates in the Indonesian region (Eurasia, Indian Ocean-Australia- New Guinea and Pacific), and that most or all of the continental blocks in SE Asia rifted from the North Gondwana margin at different times. However, models vary in many other details. Areas that appear to generate the most debate include the recent history of areas in Eastern Indonesia (Timor, Seram, Sulawesi, the Birds Head of West Papua, etc.), but also the Pretertiary history of Western Indonesia (Sumatra, Java, Kalimantan) will probably yield surprises with further geological and geophysical studies.

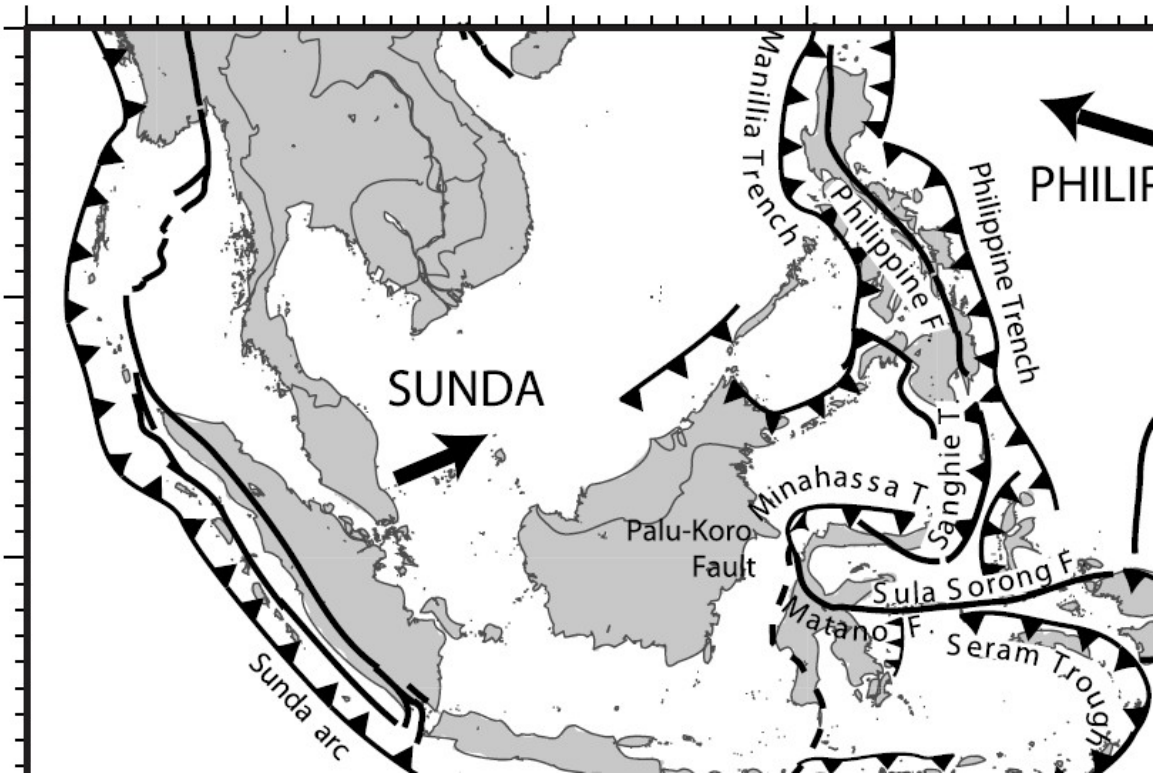


Figure I.1.9. Active subduction zones and major fault zones of the Indonesian region, the junction of three major tectonic plates: (1) relatively stable Sunda (Eurasia), (2) North-moving Australia- Indian Ocean and (3) West-moving Philippine Sea- West Pacific Plates. Arrows indicate major plate movement directions and velocities relative to Eurasia (Socquet et al. 2006).

Present-day major tectonic plates and GPS plate motions

Today Indonesia is at the convergence of three major tectonic plates: Eurasia in the West, Pacific (Philippine Sea) in the NE and Australia in the SE. The East Sulawesi- Banda Sea region is the 'triple-junction', where the three plates converge (Figure I.1.9).

Since ~1993 GPS satellite positioning technology has allowed determination of any position of any location in the world with <2-3mm accuracy. Differences in distance between GPS stations over time can now be measured, which then allows reconstruction of relative movement rates of these stations, and thus determine directions and relative surface velocities of tectonic plates.

Plate boundaries derived from present-day relative plate motion are not necessarily the same as historic plate boundaries or tectonic sutures. For instance:

1. the Timor Trough was the plate boundary between the North-moving Australia- Indian Ocean plate and the Eurasia/Banda Arc plate for 10's of millions of years, but since it locked up ~3 Million years ago, Timor and parts of the Banda Arc and Banda Sea now move largely with the Australian Plate (e.g. Fig. I.1.10).
2. much of the oblique convergence between the Indian Ocean Plate and Eurasia in Sumatra is taken up by the Great Sumatra Fault zone, which thus acts as a present-day plate boundary. However, this fault zone appears to follow the thermally weakened zone of the modern volcanic arc and probably does not reflect an older basement terrane boundary.

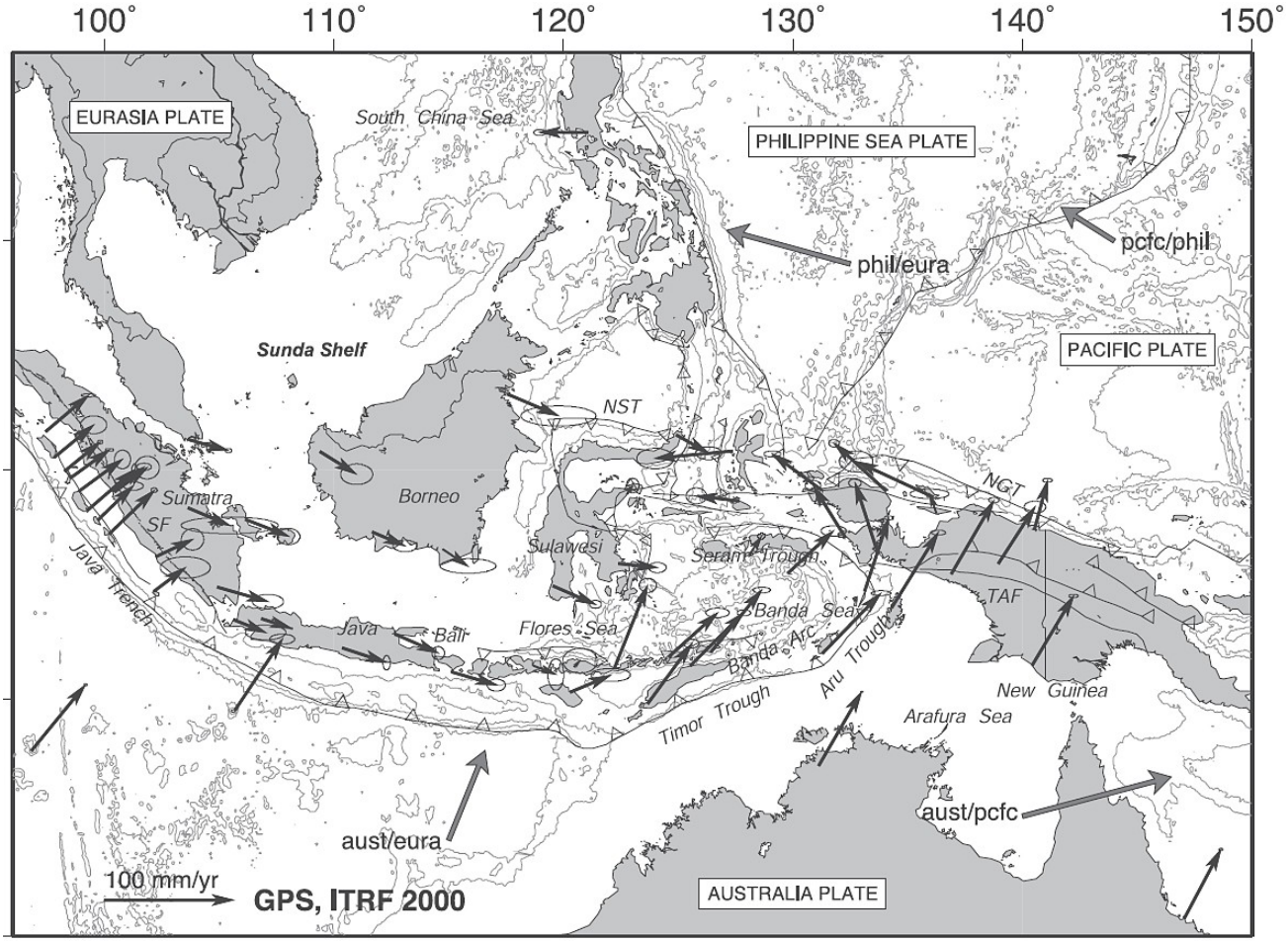


Figure I.1.10. Example of GPS-derived present-day plate motions (arrows) and plate boundaries (Bock et al. 2003). Showing velocities of ~3-10 cm/year relative to International Terrestrial Reference Frame ITRF2008. These rates translate to plate motions of 30-100 km/Myr)

A selection of key papers of GPS studies in the Indonesian region is shown in the table below.

Present-day earthquake hypocenters and Seismic tomography

An important component in the recognition of major fault zones, and in particular subduction zones, is the distribution patterns of earthquake hypocenters (e.g. Hamilton 1974).

The discovery of belts of deep earthquake hypocenters in lower crust and mantle that form landward dipping zones under active continental margins is commonly attributed to Russian and Japanese seismologists Benioff and Wadati in the 1950's. However, this pattern of landward dipping planes of deep earthquake hypocenters (now known to reflect subducting slabs of oceanic lithospheric plates) was already known in the Indonesian region in the 1930's (Visser 1937, Berlage 1937, 1939; Figure I.1.11).

Also in the 1930's the dipping earthquake belts were noted to be associated with active volcanic arcs and with strong negative gravity anomalies outboard of the arcs, which was first discovered by 'the diving Dutchman' Vening Meinesz (1933, 1934), who interpreted these as zones of 'crustal downbuckling' (Escher 1933, Visser 1937). These 1930's geologists in Indonesia came very close to discovering plate subduction, a key component of the revolutionary plate tectonics theory of the 1960's.

Significant later contributors on earthquake distribution patterns in the Indonesian region include Fitch, Cardwell and Isacks, McCaffrey, Hamilton, Das, Schoffel, Spicak, and others.

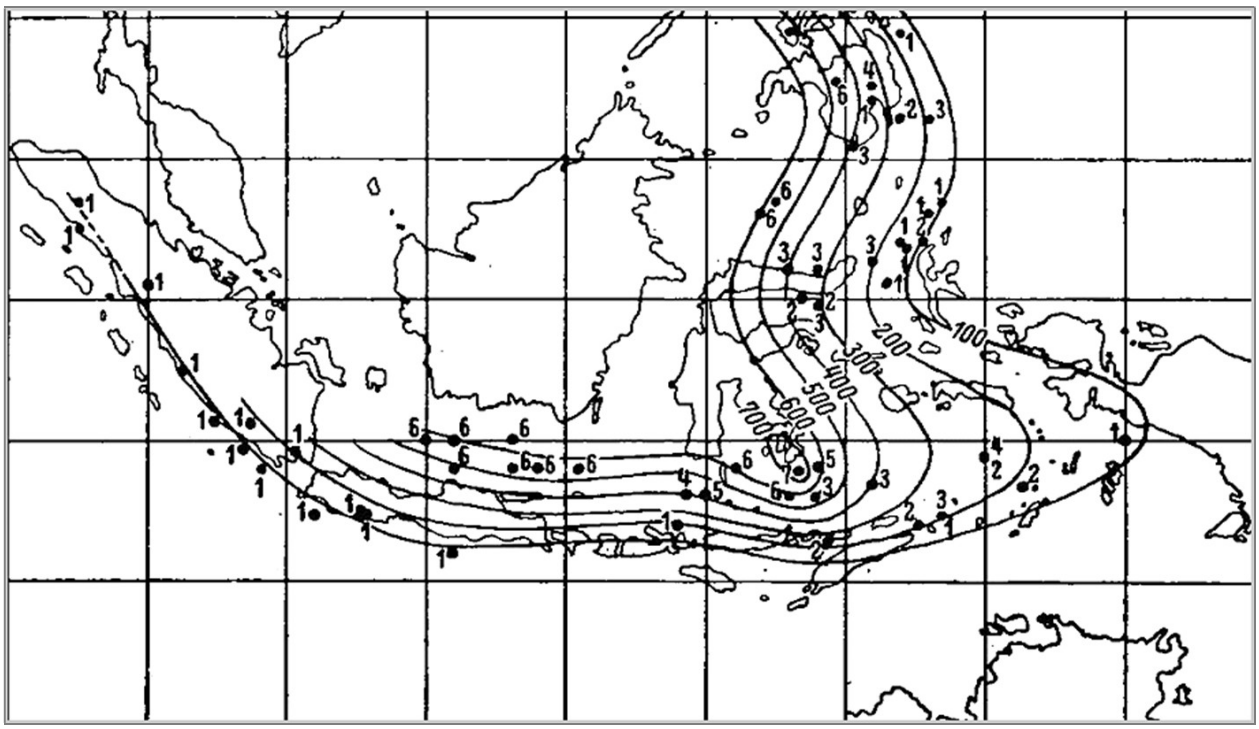


Figure I.1.11. Depths of earthquake epicenters along land-ward dipping plane, now known as Wadati-Benioff zone (Berlage 1937). North of Java deep earthquakes down to ~6km, no deep earthquakes under Sumatra.

The relatively recent technology of 'seismic tomography' (which is a high-resolution 3-D seismic velocity model of the mantle derived from now a large database of earthquake hypocenter locations and and travel time data) helps visualize the presence of relatively high-velocity and relatively cool subducted slabs in the mantle.

Key papers for regional tomography studies in the Indonesian region include Puspito et al. (1993, 1995), Widiyantoro and van der Hilst (1996, 1997), Hafkenscheid et al. (2001), Replumaz et al. (2004), Tregoning and Gorbatov (2004), Richards et al. (2007), Spakman and Hall (2010), Widyantoro et al. (2011), Hall and Spakman (2015), Spakman, Huang et al. 2015), Wu and Suppe (2016, 2017), Van der Meer et al. (2018).

Numerous other papers use seismic tomography data to solve more local tectonic issues, like magma plumbing under volcanoes, slab rupture, etc..

Geologic history and Tectonostratigraphic belts

The older tectonic history of Indonesia is recorded in the geology of the various provinces. Unraveling the mosaic of continental plates, suture zones, volcanic arcs through time, etc., is an ongoing process. For more details on the plate tectonics of the region see also Chapter I.2- Regional geology of SE Asia.

One useful tool is the concept of tectonostratigraphic belts or provinces, which are zones with similar stratigraphies and unconformities that record geologic settings and tectonic events.

Long before the formulation of the theory of plate tectonics, the pattern of separate continental crustal blocks of Eurasian-affinity in West Indonesia and Australian-affinity blocks in East Indonesia, was recognized in the 1920's-1930's. An elegant depiction by Umbgrove (1938; Figure I.1.12) shows these provinces, and where they are separated by the 'Timor- Seram- East Sulawesi geosyncline'. (zone A in Fig. I.1.12.). This 'geosyncline' is characterized by continuous Permian- Cretaceous deep marine facies and is now understood to represent the suture zone of the Mesotethys Ocean that closed around Eocene time.

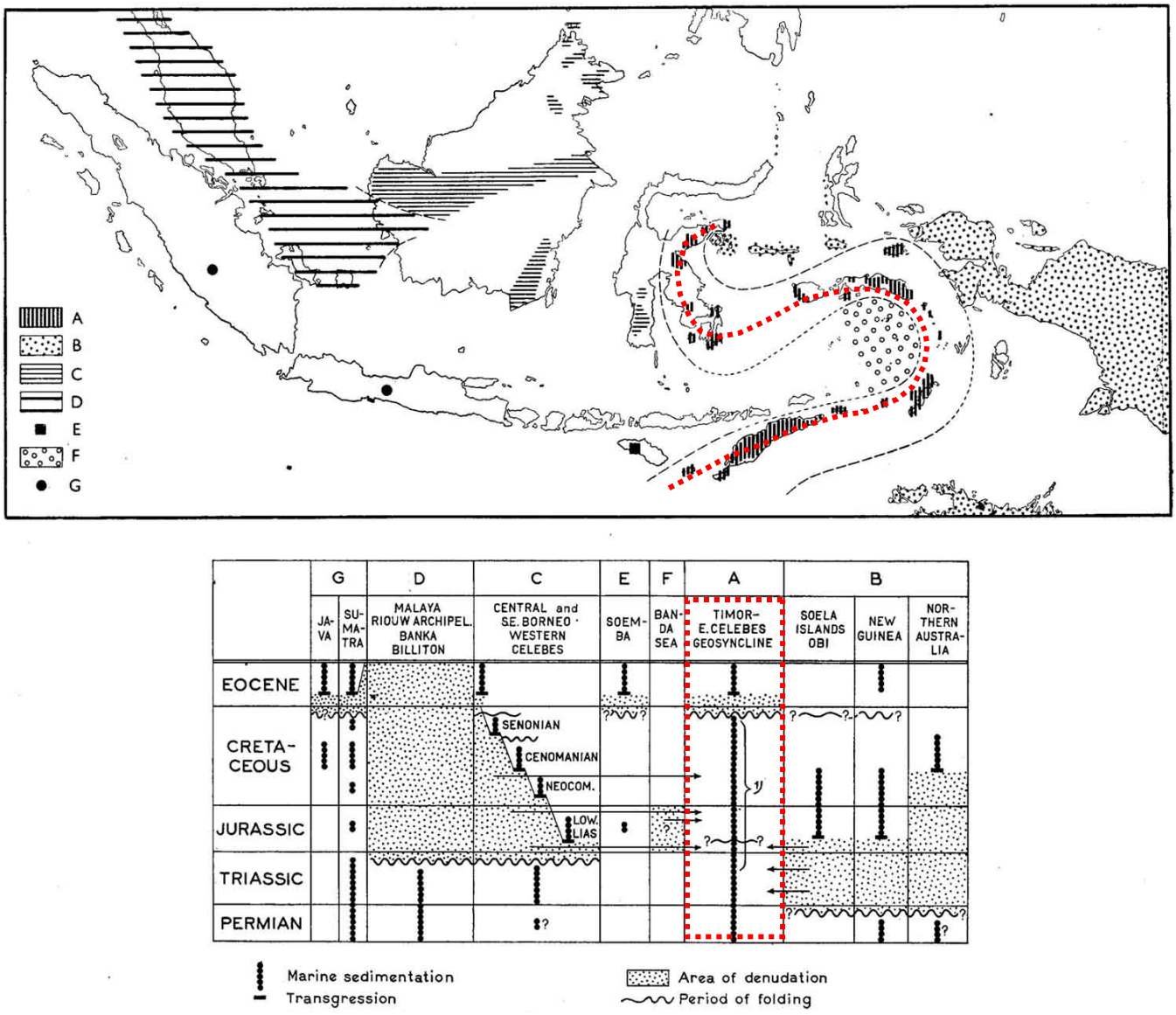


Figure I.1.12. Tectonostratigraphic provinces in Indonesia, as understood by Umbgrove (1938), identifying areas with similar Late Paleozoic- Eocene tectonostratigraphy. A = Timor- Seram- East Sulawesi geosyncline, B = New Guinea- North Australia- Sula Islands, C = Central and SE Borneo- W Sulawesi, D = Malay Peninsula, Riau archipelago- Bangka- Belitung, E= Sumba, F = Banda Sea, G = Java- Sumatra.

Paleomagnetic studies

Paleomagnetism is another powerful tool to constrain plate tectonic reconstructions. Many sedimentary and igneous rocks contain magnetically susceptile iron minerals that are still oriented in the direction of the magnetic field of the time in which the rocks formed. Paleolatitude of a rock sample can be derived from the inclination of the paleomagnetic orientation, and rotationsince rock formation from the declination.

Interpretation of paleomagnetic data is not always unequivocal or easy. Operators need to verify that:
- sample locations are representative for regional deformation, and are not affected by local deformation;
- the paleomagnetic signal was not reset during younger thermal events;
- correct paleo-pole position is used;
- correct polarity of the magnetic field (normal or reversed) at the time of rock formation is used.
- conclusions on paleolatitude are corrected for (1) depositional dip and (2) inclination shallowing (compaction of sedimentary packages may reduce dip angles, and thus underestimate paleolatitude).

A map of paleomagnetic directions in Indonesia was compiled by Mubroto et al. (1993). Another useful review of paleomagnetic data, including chapters on the Indonesia/ SE Asia region, is the book of Van der Voo (1993).

Pioneering studies in various parts the Indonesian region were by Haile (1977, 1978, 1979; Seram, Sumatra, Sulawesi, West Kalimantan), Nishimura & Suparka (1997), Sasajima et al. (1978, Sumatra, West and North Sulawesi), and Otofuji et al. (1981; North Arm Sulawesi).

Several independent paleomagnetic surveys concluded that 'South Sundaland' (Malay Peninsula - Borneo- East Sumatra) acted as a single block that underwent ~30- 50° counterclockwise rotation since the Late Cretaceous (most likely between Late Eocene- Middle Miocene) (Haile et al. 1977, Untung et al. 1987, Schmidtke et al. 1990, Fuller et al. 1991, 1999, Sunata and Wahyono 1991, Richter et al. 1999)). This Cenozoic CCW rotation of Borneo was incorporated in plate reconstruction models of Hall (1996 and others), but has since been questioned by Murphy (1988), Hutchison (2010), Tjia (2012) and Marshall (2016).

Paleomagnetic studies from the East Indonesian region include
- Sumba: clockwise rotations of Late Cretaceous flysch deposits by ~60°- 90° *(Nishimura et al. 1981; Otofuji et al. 1979, 1981 , Wensink 1994, 1997)*
- Timor (*Chamalaun 1977, Wensink and Hartosukohardjo 1987,1990, Panjaitan and Hutubessy 1997, 2004)*;
- East Sulawesi ophiolite *(Mubroto 1994)*,
- Halmahera- Banggai-Sula region *(Ali and Hall 1995, Ali et al. 2001, Obi)*;
- Birds Head West Papua *(Giddings et al. 1993)*;
- Misool *(Thrupp et al. 1987)*;
- Papua New Guinea: significant rotations of blocks in North New Guinea *(Klootwijk et al. 1987, 1993, 2003).*

Paleomagnetic data suggest significant, opposing rotations of the western parts of Sulawesi:
1. clockwise rotations of the North Arm in Middle Miocene- Pliocene *(Otofuji et al. 1981, Surmont et al. 1994)*;
2. 35-80° CCW rotation of the SW Arm since Middle Miocene *(Haile 1978, Sasajima et al. 1978, 1980, 1981, Panjaitan and Mubroto 1993, Panjaitan 2009)*.

Paleomagnetic work in Central Java on the Late Cretaceous(?)- Early Miocene 'Old Andesites' of the Southern Mountains suggest a 10° or more northward shift of the Southern Mountains volcanic arc (Mahfi 1984, Bijaksana et al. 2003, Ngkoimani 2005, 2006, Sunardi 2010).

Paleomagnetic data from mainland SE Asia suggest most Paleozoic rocks were probably affected by resets during Late Carboniferous and Cretaceous thermal events (Powell et al 1980, Metcalfe 1993, Van der Voo 1993).

Numerous additional papers from mainland SE Asia, The Philippines and the SW Pacific region are listed in the Bibliography.

Paleobiogeography as a plate reconstruction tool

Compositions of faunal and floral assemblages are partly controlled by paleoclimate/ paleolatitude at the time of deposition. Some taxa or groups are limited to warm, low latitudes, others are restricted to cooler, temperate climates and show 'anti-tropical' geographic distributions.

Faunas/ floras from comparable climate belts may show provinciality if they were geographically separated by land masses or deep oceans that impeded migrations between areas. Once the reasons for such paleobiogeographically-controlled provinciality of fossil assemblages are understood, they can then be used for paleogeographic reconstructions, they may then may provide constraints on the reconstruction of the mosaic of tectonic blocks in SE Asia.

Analyzing faunas-floras for paleobiogeographic patterns of plate tectonic significance can be tricky:

- Age: faunas/ floras may be different due to different ages, and are not necessarily from different paleogeographic provinces;
- Depositional facies: may be different because they are from different depositional facies, and do not necessarily relect different paleogeographic provinces;
- Taxonomy is quite important: closely related assemblages may have different sets of genus/ species names because fossils were identified by different specialists, but in reality are comparable. By contrast, imprecise determinations or lumping species into higher taxonomic units may suggest similarities between floras/ faunas, where in reality all species are different and represent different faunal/ floral provinces.
- Even when different faunas/floras reflect different paleoclimates this does not necessarily mean they are on different tectonic plates. Instead this may reflect a gradual paleolatitudinal transition on the same plate, or short-term climate warming-cooling events in the same area.

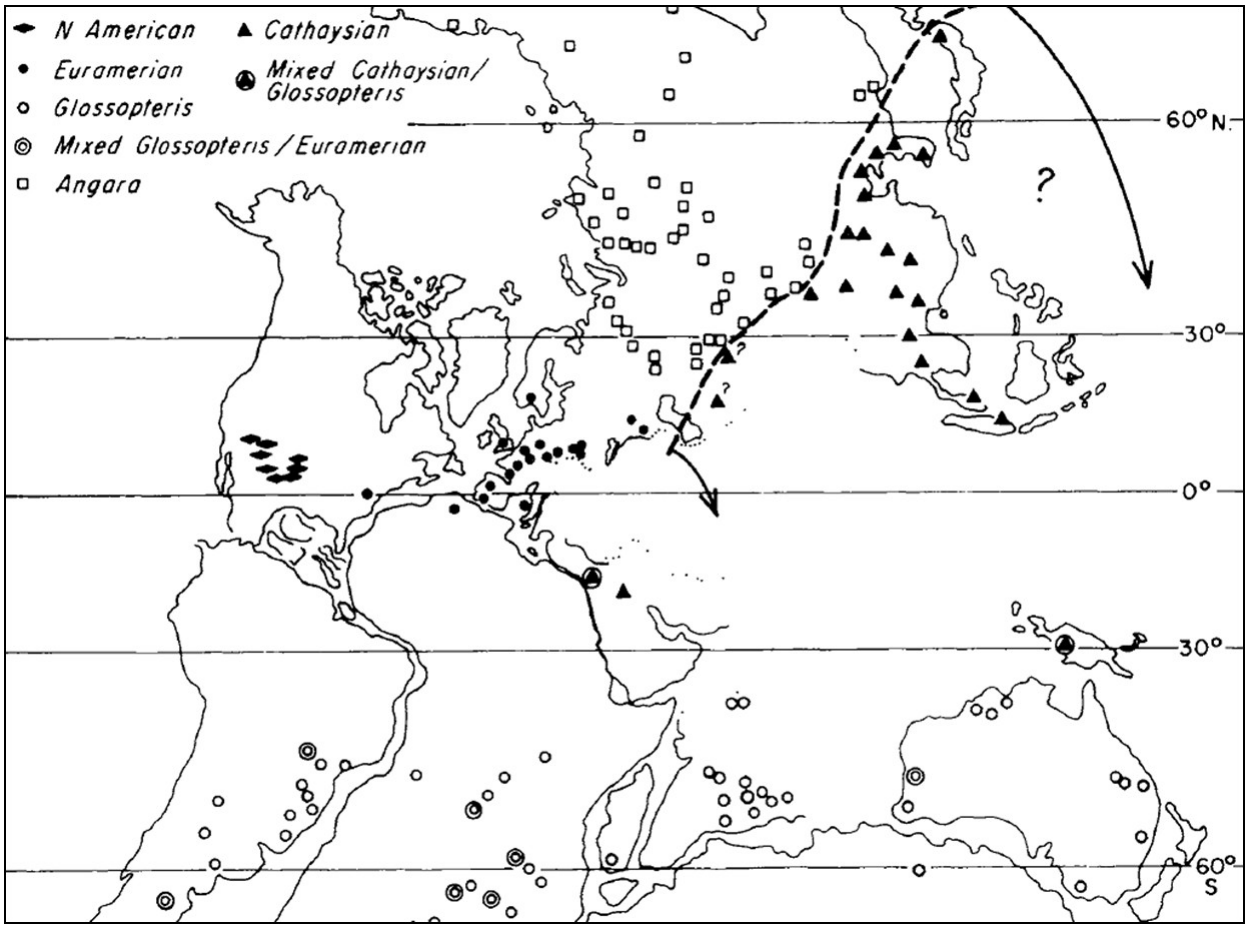


Figure I.1.13. Distribution of Late Carboniferous- Early Permian floras on a Permian reconstruction, showing Cathaysian floras in SE Asia and Gondwanan floras in Australia- India (Stauffer 1985).

Some of the most frequently used fossils with perceived paleobiogeographical significance include:

1. Early Permian floras with distinct low latitude 'Cathaysian'/ Eurasian assemblages and higher latitude/ Gondwanan *Glossopteris* floras (Figure 1.1.13; Asama 1976, 1984 and numerous papers). However, there are examples of mixed floras (West Papua), suggesting these floras may reflect paleoclimate zones rather than paleo-position on tectonic plates (e.g. Scotese 2011, Figure 1.1.14)

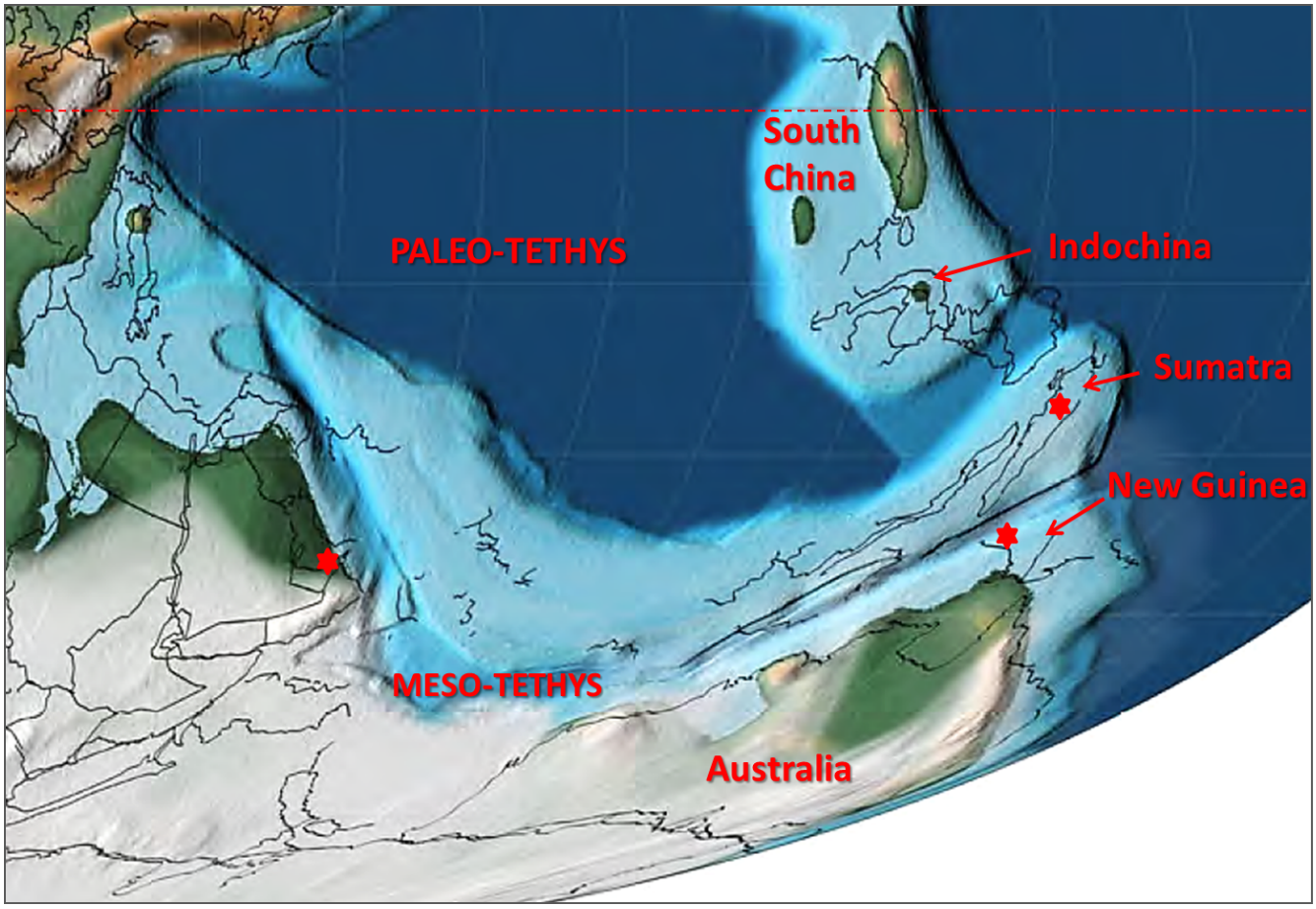


Figure I.1.14. Early Permian (Sakmarian; 297 Ma) reconstruction of Scotese (2014, Map 56), showing Sumatra as part of Cimmerian/ Sibumasu terranes, in process of rifting off Gondwana near New Guinea.

2. Permian brachiopod and fusulinid foraminifera assemblages assemblages (Fontaine et al. 1994, Fontaine 2002, Archbold 2000, 2001, Shen et al. 2013, etc.): define distribution and evolution of 'Cimmerian'/ Sibumasu terranes;

3. Late Triassic brachiopods: 'peri-Gondwanan'/ 'Southern Tethys assemblages with *Misolia* are found from Oman through the Himalayas to East Indonesia (Misool, 'Fatu Limestone' of Timor, Seram, Buru, East Sulawesi) and the NW Australian margin (Ager and Sun 1988, Dagys 1993; Figure I.1.15), but *Misolia* is not known from the Late Triassic of West Sumatra or NW Borneo (e.g. Krumbeck 1914);

4. Late Triassic pelagic bivalves *Monotis salinaria* (low-latitude Tethyan; Timor, Seram) versus *Monotis subcircularis* (mid-latitudes; NW Kalimantan, Indochina, etc.) (Silberling 1985);

5. Late Triassic ammonites (incl. *Juvavites, Neotibetites*), corals, sponges (incl. *Heterastridium, Lovcenipora, Tubiphytes?*), etc. from Timor, Buru, Seram, etc., have long been known to be very similar to the Alps and Himalayas (e.g. Diener 1916), suggesting uninterrupted (Meso-)Tethyan connections in relatively low latitudes (= maximum size of Mesotethys);

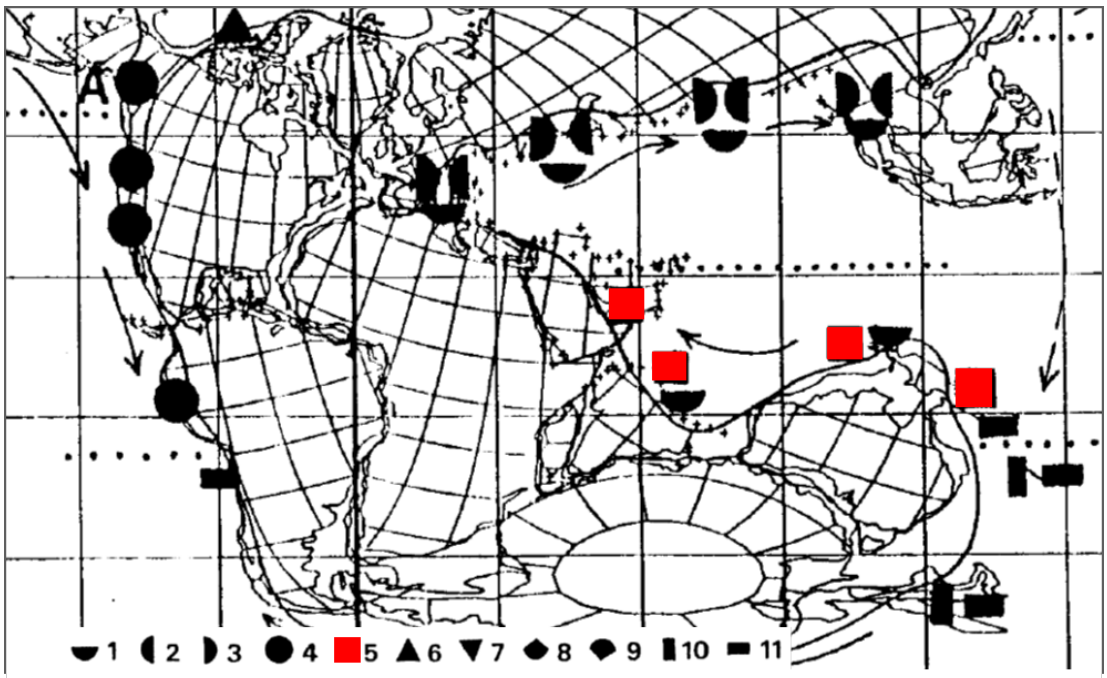


Figure 2. Distribution of selected Late Triassic brachiopod genera (from Dagys, 1993). *5, Misolia; 6, Canadospira; 7, Viligella; 8, Aulacothyroides; 9, Pseudohalorella; 10,*

Figure I.1.15. Late Triassic brachiopods 5= Misolia= typical of southern margin of Mesotethys Ocean

6. Middle- Late Jurassic bivalves and ammonites: Sundaland (Sumatra, NW Borneo) with low-latitude Asian affinity Jurassic shallow marine sediments with bivalve *Parvamussium*, foram *Pseudocyclammina lituus*, etc..(Fontaine et al. 1983). In New Guinea and the Sula islands are Middle- Late Jurassic marine facies with higher-latitude 'North Gondwana/ Austral' fossils characterized by the Late Jurassic pelagic bivalve *Malayomaorica* and Middle Jurassic *Macrocephalites* ammonite assemblages, none which is known from Western Indonesia (Fig. 1.1.16 of Umbgrove 1938; Enay and Cariou 1999);

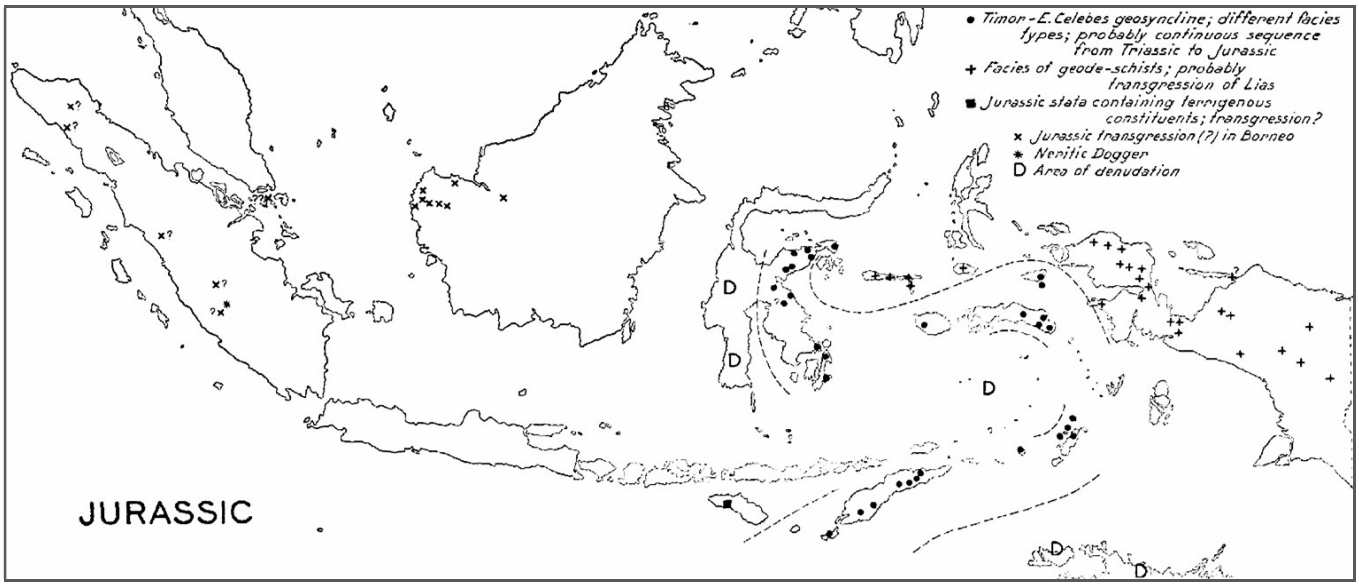


Figure I.1.16. Two different Jurassic facies/ faunal domains in Indonesia, separated 'Timor- Seram- East Sulawesi geosyncline' with continuous Jurassic pelagic facies (solid dots; = Mesotethys suture) (Umbgrove 1938): In West.(x) Sumatra- West Kalimantan, Jurassic shallow marine transgressive sequences (= Sundaland); In East (+) West Papua Middle- Late Jurassic shale facies with geodes, bivalve Malayomaorica and Macrocephalites ammonites (= Gondwana continental margin).

7. Early Cretaceous larger foraminifer *Orbitolina* and (rare) rudistids molluscs. These shallow marine, typical low-latitude Tethyan fossils are widely distributed in West and South Sumatra, Kalimantan, Central Java and West Sulawesi, but are not known from New Guinea or NW Australia, suggesting relatively wide separation at that time.

8. Eocene larger foraminifera: biogeographic separation of *Pellatispira* in SW Pacific- West Indonesia-Neotethys (including Sumba, Seram and Banda Terrane of Timor) and *Lacazinella* in NW Australia- New Guinea and related terranes like Misool and the Banggai-Sula block (Lunt, 2003);

9. The Eocene- Miocene palynological record of SE Asia contains evidence of floral migration events that can be tied to plate tectonic events (Morley 1998, 2000, Lelono 2012). The arrival of Gondwanan migrants in Indonesia in the Eocene such as *Dacrydium, Casuarina* and *Podocarpus* may be tied to the collision of India and Asia. Miocene migrations like distinct increase of Myrtacea pollen at 17 Ma may be tied to the collision of New Guinea with Eastern Indonesia arc/ microcontinents. Dipterocarps, important contributors to oil source rocks on Sundaland in Eocene-Oligocene time, did not occur in New Guinea until until after the Miocene collision.

Plate Reconstructions

The ultimate synthesis of the tectonic evolution of an area is a series of plate reconstructions. Ideally these reconstructions incorporate all known information on the geology of individual plates, especially tectonostratigraphy (stratigraphic successions, ages of unconformities/ deformational events, positions and ages of magmatic arc activity, etc.), paleomagnetic data, paleobiogeographic indicators, etc. (e.g. Figs. I.1.17, I.1.18).

For the Indonesia/ SE Asia region the series of papers by Ian Metcalfe (1988, 1996, 2002, 2009, 2011, 2013, 2017, etc.; Paleozoic- Recent) and Robert Hall (1995- 2017; Eocene- Recent time, but after 2012 back to Jurassic time) have now become the 'gold standards' of SE Asia plate reconstructions.

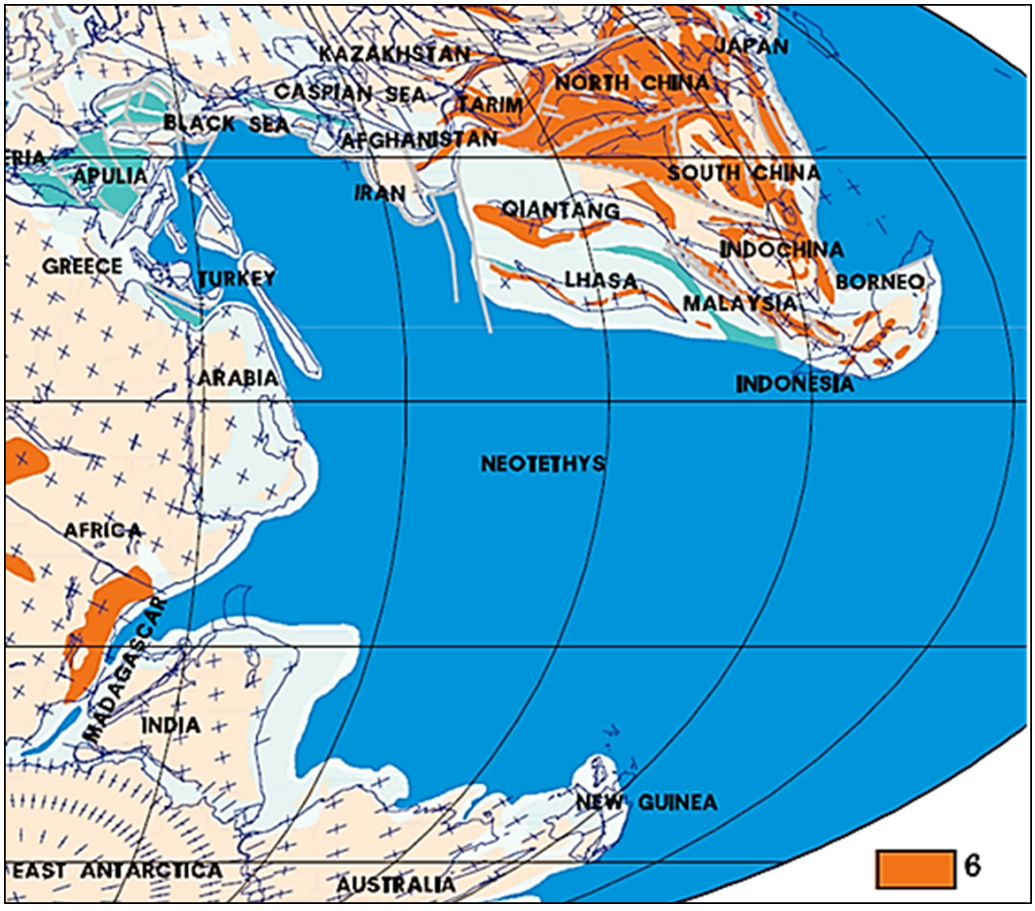


Figure I.1.17. Example of part of Early Cretaceous (146-135 Ma) reconstruction of Golonka (2006), the time of maximum separation between Australia-New Guinea and SE Asia.

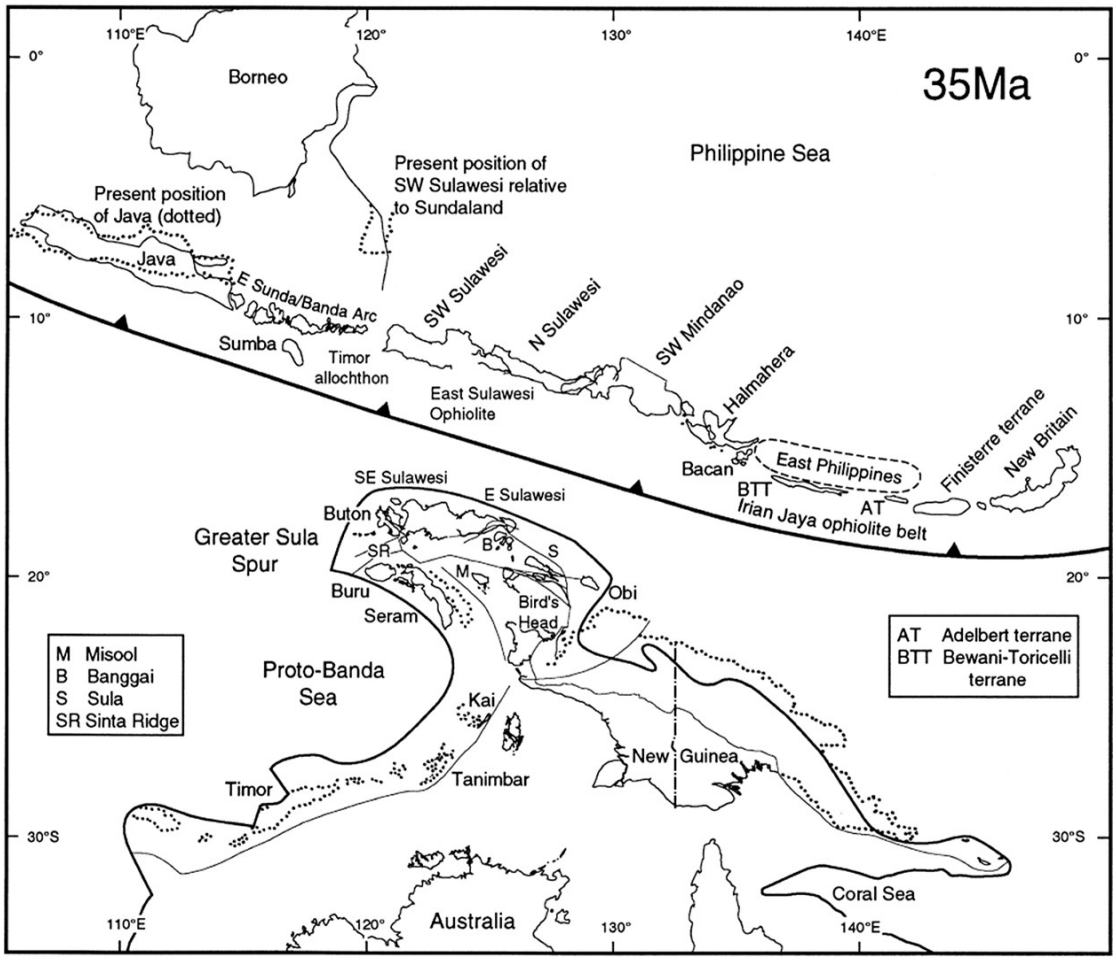


Figure I.1.18. Example of Late Eocene reconstruction (Charlton, 2000), showing a restored Eocene 'Great Indonesian Volcanic Arc, which is now fragmented and distorted almost beyond recognition. Sumba and the Timor Allochthon (= Banda Terrane) are in forearc positions of this arc and are not part of the Australian plate.

Notable papers with alternative plate reconstructions that differ in details from the above, include:
- J. Katili (1971, 1989, 1991)
- N. Haile et al. (1973): SE Asia subduction zones
- P. Stauffer (1974-1986)
- M. Audley-Charles et al. (1976, 1983, 1988): Permian- Cretaceous Gondwanaland- Tethys reconstructions
- C. Hutchison (1973, 1987, 1989, 1994, 1996, 2007, 2014): Sundaland plates history
- C. Pigram and Panggabean (1984) and Struckmeyer et al. (1993): New Guinea- East Indonesia
- H.M.S. Hartono and Tjokrosapoetro (1984, 1986)
- T. Barber (1985 and others)
- T. Charlton (1986, 1991, 2000, 2013, 2016): East Indonesia reconstructions
- R. Murphy (1987, 1998, 2002)
- C. Sengor et al. (1985, 1988, 2009): mainland SE Asia
- Daly, Hooper et al. (1987, 1989, 1991)
- M. De Smet, (1989, 1999)
- Nishimura & Suparka (1990)- Eastern Indonesia at 4, 17 Ma
- C. Rangin, Jolivet & Pubellier (1990): SE Asia in past 43 Myrs
- G. Packham (1990, 1993, 1996)
- T. Simanjuntak (1992, 1994, 1996, 2000)
- Gorur & Sengor (1992): NW Australian shelf breakup events tied to collision events in Tethysides
- J. Milsom et al. (1992, 1993, 2000, 2001): East Indonesia tectonostratigraphy and suture zones
- L. Ricou (1994)
- J. Sopaheluwakan (1994, 1996): Banda Arc, Timor
- Lee and Lawver (1995): SE Asia reconstructions

- I. Longley (1997)
- M. Villeneuve et al. (1998, 2001, 2004, 2010): East Indonesia
- M. Pubellier et al. (2003, 2004, 2005, 2013): DOTSEA kinematic reconstructions back to 20 Ma, etc.
- R. Harris (2006): Timor, East Indonesia
- J. Golonka (2000, 2006, 2012, 2018): global plate reconstructions
- C. Scotese (1988-2017): global plate reconstructions
- R. Dietmar Muller and co-workers (2000-2017): oceanic basins reconstructions
- C.K. Morley (2001, 2002, 2012, 2013): Cenozoic mainland SE Asia, rift basins
- N. Sribudiyani et al. (2003): East Java microplate
- Gaina & Muller (2007): SE Asia- N Australia- W Pacific major plates and paleobathymetry back to 50 Ma
- Zhou et al. (2008) Greater South China Sea- Borneo reconstructions
- A. Satyana (2003, 2009, 2012)
- S. Zahirovic et al. (2014, 2016).
- A. Gibbons et al. (2012, 2015)

SW Borneo Block

One major 'bone of contention' in recent plate reconstruction models is whether there is a separate SW Borneo Block that rifted off the NW Australia margin in Late Jurassic time ('Argoland') and collided with SE Asia in mid-Cretaceous time (Hall 2011, 2014, Metcalfe 2013; e.g. Figure I.1.2.), or whether SW Borneo/ Kalimantan has been part of 'Sundaland' since its amalgamation in Late Triassic time (most older papers like Umbgrove 1938 (Figure I.1.11), Zhou et al. 2008, and global models of Scotese 2001 and others, Golonka 2006 and others, Gibbons et al. 2015, Zahirovic et al. 2016, etc.). Metcalfe (1998 and others) viewed SW Borneo as a separate plate, but derived from the Indochina/ Cathaysialand margin.

Problems with the recent scenario of SW Borneo Block as a Gondwanan terrane that was added to Sundaland in Cretaceous time include:

1. Gravity and seismic data of the Sunda Shelf (the proposed area for the suture zone) show good continuity between Sumatra and Kalimantan (e.g. Figure 1.1.5), with no obvious evidence for a basement suture/ terrane boundary;
2. There is no stratigraphic support from Borneo for this scenario. The only area on the island where Permian-Jurassic rocks are not destroyed by Cretaceous magmatism, metamorphism and uplift/erosion is in the NW Kalimantan- SW Sarawak border area. This area shows Sundaland- affinity imbricated Carboniferous- Early Permian sediments, unconformably overlain by Late Triassic- Cretaceous sediments with low-latitude floras and faunas of Indochina affinity/ unconformities (Zeijlmans van Emmichoven 1939). This Permian-Cretaceous tectonostratigraphy is definitely not Gondwanan, but fits well with other parts of Sundaland that were affected by the Late Triassic Indosinian orogeny (Sumatra, Bangka, Malay Peninsula, etc.) (see also additional papers on Borneo in Chapter V).

DOTSEA (2005) kinematic reconstructions

An interesting exercise by the DOTSEA project (Pubellier et al. 2005). shows kinematic reconstructions of SE Asia back to 15 Ma, by simple back-tracking of measured present-day GPS plate motions (directions and velocities), assuming these have been constant since then. In a series of maps they restored areas of oceanic crust that have been subducted. Interesting elements of the 15 Ma restoration map, that are not part of most 'mainstream' interpretations, include (1) the position of Birds Head well North of New Guinea and (2) a significant area of consumed (oceanic?) crust in the North Makassar Straits basin, which at that time may have been double the width. (Figure I.1.19).

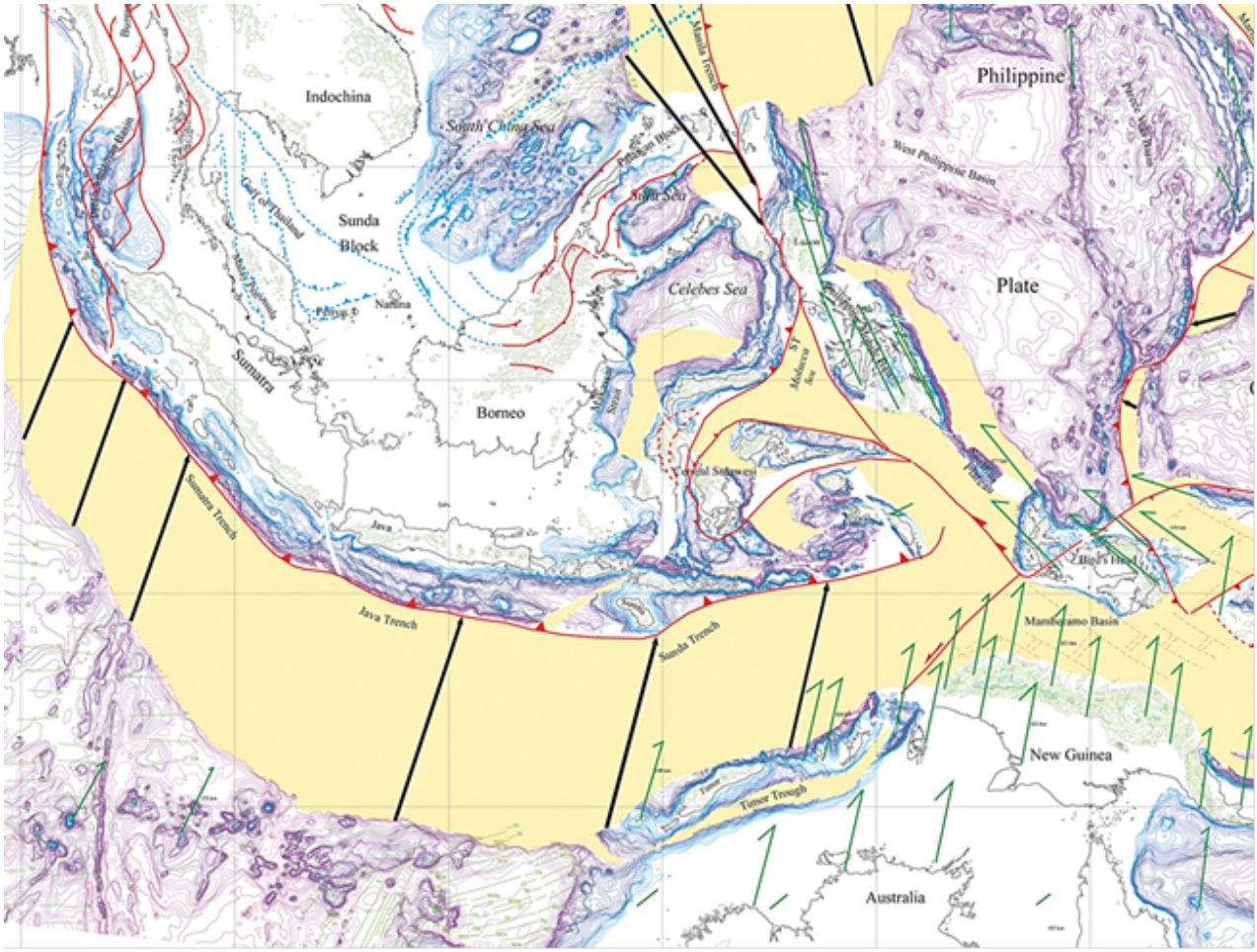


Figure I.1.19. Kinematic reconstruction of the Indonesian region for 15 Ma (Middle Miocene), built from back-tracking present-day GPS plate motions. Yellow areas are areas of oceanic crust that are now subducted. (Pubellier et al. 2005; DOTSEA project; part of 15 Ma map).

I.3. Volcanism, Volcanic rocks geochemistry

Chapter I.3 of the Bibliography focuses on papers on regional volcanism in the Indonesia- West Pacific region. Many additional papers that are specific to a single region will be under the chapter for the area in which they are located. Most of the papers on volcanics of Java island are listed in Chapter III.3.

Papers on individual eruption events and volcanic hazards are not included in this Bibliography, unless they contain significant geological information.

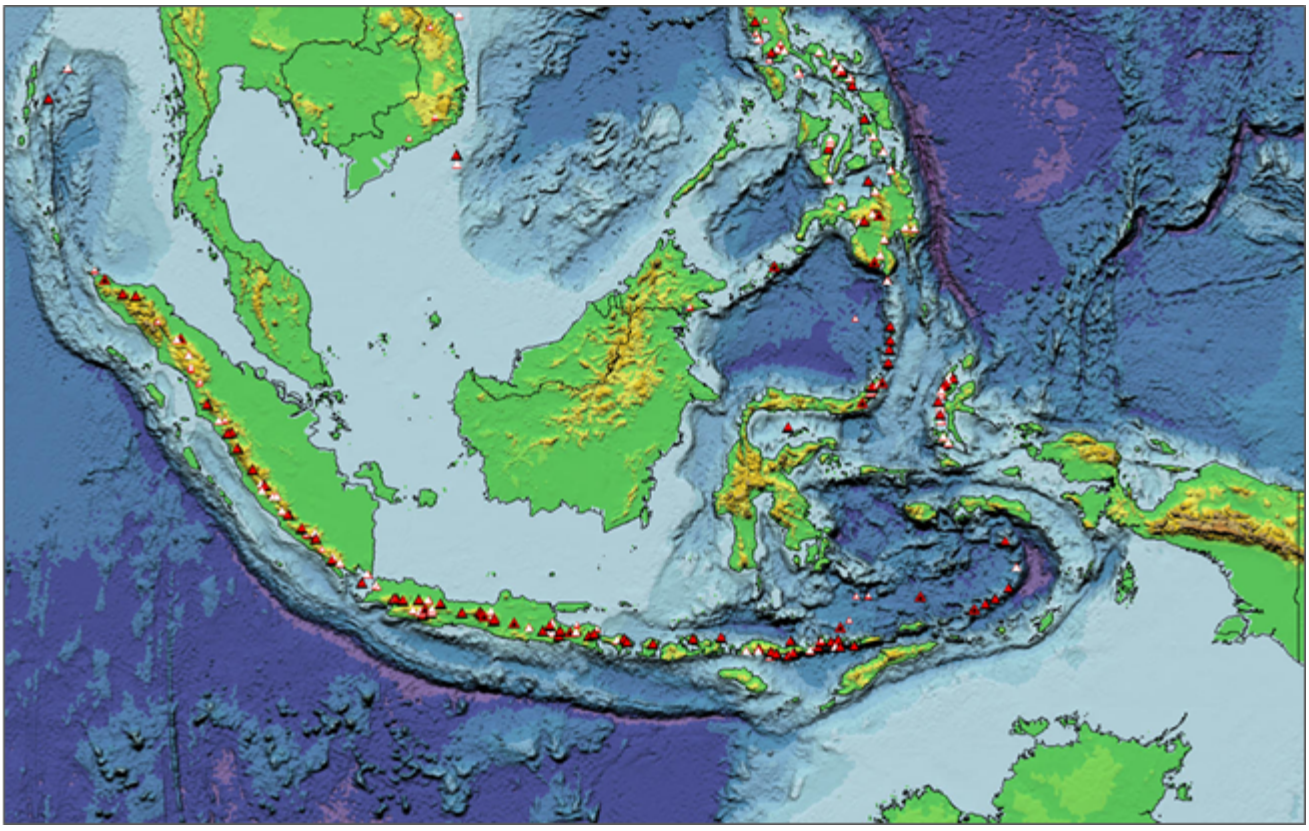


Figure I.3.1. Active volcanic centers of the Indonesian region can be grouped in Sunda Arc and Banda Arc of Sumatra- Java- Lesser Sunda Islands, and the Sangihe Arc and Halmahera Arc West and East of the Molucca Sea (Smithsonian map).

Indonesia, with its 128 active and numerous extinct volcanoes, is one of Earth's most volcanically active regions of the world (Figure I.3.1). Partly because of some of the largest eruptions in recorded history (Tambora 1815, Karakatau 1883) the country has attracted volcanological studies for over 130 years. The extensive report by Verbeek (1885-1885) on the geology of Krakatau volcano in Sunda strait and the sequence of events around the 1883 eruption made Verbeek a worldwide celebrity (Figure I.3.2).

Volcanic arcs form above subducting oceanic slabs, generally where the Wadati-Benioff zone reaches a depth of ~100km (England et al. 2004). This depth may vary along strike (e.g. average 90 km in West Java, closer to 150km depth in Central and East Java, East of 108°E; Syracuse and Abers 2006), and in dip direction.

In Indonesia active volcanism occurs along three main arc segments, Sunda-Banda, Sangihe and Halmahera (Figure I.3.1). The first two of which were probably once a continuous system, related to the same North-moving subducting Indian Ocean- Australian plate.

Active and extinct arc systems may be classified by age and by subducting oceanic plates:
- from South: Mesotethys, Neotethys, Indian ocean- Australian (Cretaceous, Eocene, Oligo-Miocene and Recent arcs of Sumatra, Java, SE Kalimantan, West Sulawesi, etc.);
- from East : Pacific Ocean/ Philippine Sea Plate (Halmahera?, Philippines, West Sulawesi)

- from North- NW: 'Paleo-Pacific? (Kalimantan Triassic and Cretaceous arcs), 'Proto-South China Sea' (Kalimantan Oligocene- Middle Miocene arcs), Celebes Sea (North Sulawesi), Philippine Sea Plate (New Guinea Late Miocene- Pleistocene).

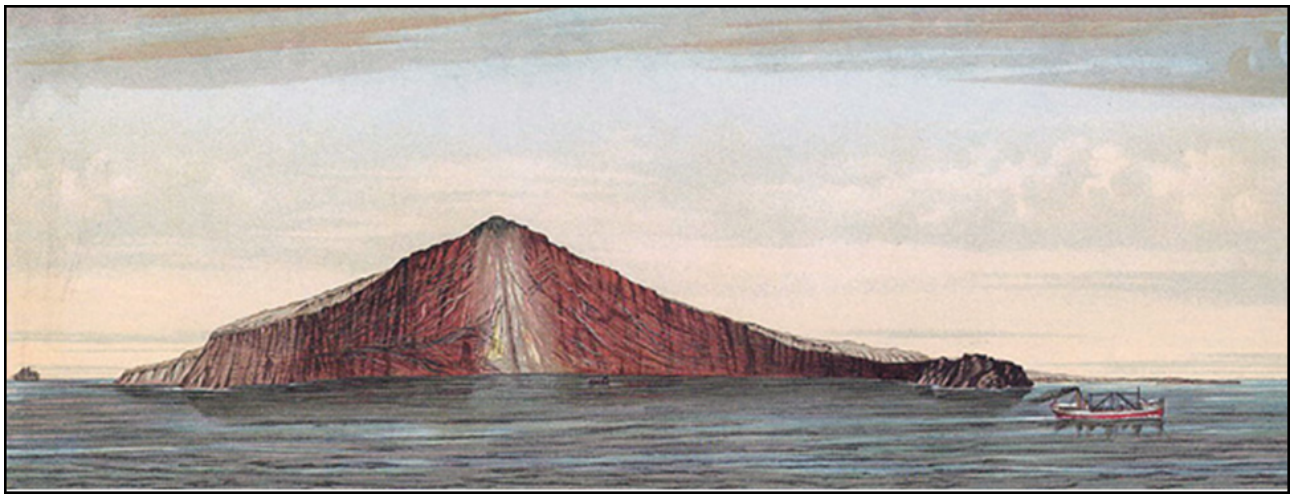


Figure I.3.2. Remnant of Krakatau volcano in Sunda Strait, after the 1883 eruption (Verbeek 1885).

Preservation of volcanic edifices

Many of the active volcanoes of Indonesia build up to elevations of 3000m, some are up to 3700-3800m ihigh (Kerinci on Sumatra, Semeru on Java, Rinjani on Lombok). However, the preservation potential of these volcanic cones in the geological record is rather low.

After volcanic activity ceases, erosion of volcanic edifices tends to be quite rapid, and most of the volcanic material ends up in a wide mantle of eroded volcanoclastics. Most of what will be preserved in the geologic record at the eruption site will be the basal volcanic deposits and the underlying intrusives (feeder pipes, dikes and granitoids that formed the deeper magma feeder system) (Figure I.3.3).

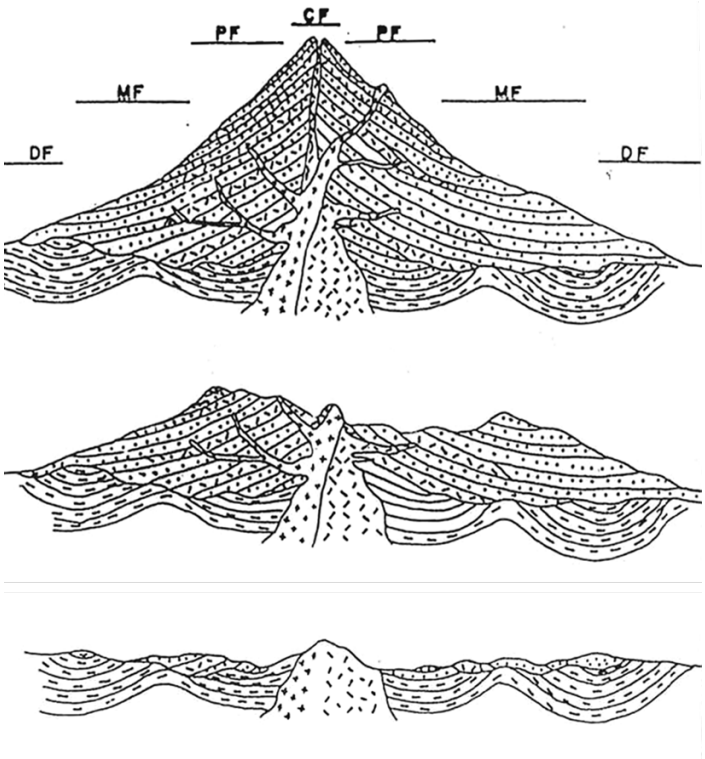


Figure I.3.3. Successive stages of erosion, from active volcano (top) to completely eroded (bottom). CF, PF, MF, DF= Central, Proximal, Medial and Distal facies of volcanic deposits (from Isnawan and Bronto 1997).

Volcano spacing in Indonesian volcanic arcs

In volcanic arc systems volcanic activity at the surface is not continuous along the entire arc, but tends to be in discrete volcanic eruption centers, that are separated by areas of no volcanism. The spacing between volcanic centers is often quite at regular, with distances of around 70 km, both in Pacific hotspot seamount chains and in Pacific volcanic arcs above subduction zones. Some authors suggested volcano spacing tends to be close to (but generally slightly less than) the underlying lithospheric thickness (Vogt 1974, Mohr and Wood 1976).

On Java volcano spacing is rather irregular in West Java, but in East Java volcanoes they are fairly regularly spaced at ~70km (Figure I.3.4.). In the East Sunda- West Banda island arc volcano spacing from Bali-Sumbawa averages 68 km, Flores is highly irregular, but in the East Banda Arc the average is 72 km (Ely and Sandiford 2010).

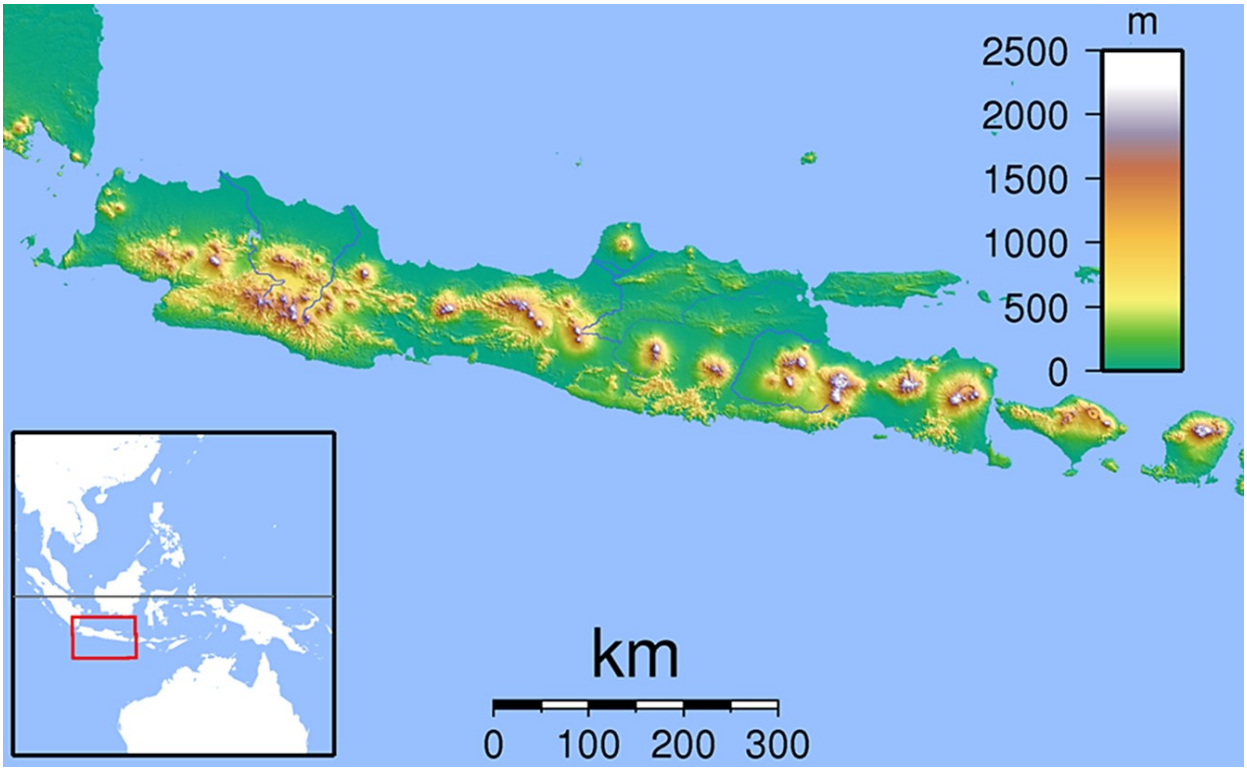


Figure I.3.4. Many of the active volcanoes of the Sunda Arc on Java are spaced at ~70 km apart.

Volcanic centers of the Sangihe Arc on and south of Sangihe Island are evenly spaced at ~50 km apart.

Lateral shift of volcanic eruption centers

As noted by several authors, some of the larger volcanic complexes on Java show remarkable southward shifts in eruption centers through time, i.e. in the direction towards the subduction zone (Neumann van Padang 1936,). While the modern arc runs North of the Late Oligocene- earliest Miocene 'Old Andesites' arc fo the Southern Mountains, the Quaternary edifices of Slamet, Sumbing- Sundoro, Ungaran- Merbabu- Merapi, Lamongan, and Semeru all show a North-to-South migration (Figure I.3.4).

There is no generally accepted explanation for this yet, but it probably involves slab rollback and/or relative northward movement of the upper plate.

This is not the same as the >50km northward shift of the axis of arc magmatism on Java from the Late Oligocene- Early Miocene 'Old Andesites' system of the Southern Mountains of the axis of the Pleistocene-Recent Sunda Arc. This was probably not a continuous, gradual process; these two may be two unrelated volcanic episodes/ belts, with a temporal gap in volcanism between 11-18 Ma (Bellon et al. 1989) or longer.

Geochemistry of volcanic rocks

Numerous papers have been written on major elements, trace elements and isotope geochemistry of volcanic rocks and gases from the Indonesian volcanic arc systems, dating back to the early 1900's.

Commonly reported trends in geochemistry of volcanic products include:

1. an overall increase in K_2O and alkali % with depth to the Benioff zone depth, with low-K 'volcanic front' lavas and medium-high K 'Rear Arc' lavas, often with leucite-bearing volcanics, above the deeper parts of the Benioff zone (Rittmann 1953, Hutchison 1975, 1976, 1981, Soeria-Atmadja et al. 1988, Sendjaja et al. 2009). However, there is rather high variability in this trend and some authors questioned its validity (Leterrier et al. 1990, Abdurrachman et al. 2015);
2. Many volcanic complexes go through a similar evolution from Early Stage basalt or basaltic andesite, Middle Stage andesite and Late Stage dacite;
3. Many arc volcanic rocks appear to be contaminated with continental crustal rock or sediment material, as indicated by common dacite/ rhyolite, high Rb/Sr ratios, etc. (e.g. Van Bergen et al. 1993, Abdurrachman and Yamamoto 2012).

Key papers geochemistry of Sunda-Banda Arc volcanic products include: Hutchison 1975, 1976, 1981, Nicholls and Whitford (1976, 1978, 1980), Foden (1979, Soeria-Atmadja et al. (1988, etc.), Hilton et al. (1989, 1992), Poorter et al. (1989, 1991), Gasparon and Varne (1994, 1998), Zulkarnain (1995-2016), Hoogewerff at al. (1997, 1999), De Hoog et al. (2001, 2009), U. Hartono (1994-2011), MacPherson et al. (2003, 2010), Elburg et al. (2004, 2005, 2008), Handley et al. (2006-2018), Abdurrachman et al. (2011-2017), Dempsey (2013), Van Bergen et al. (1989, 1992, 1993) etc..

Variations in composition of lavas along Sunda-Banda Arc reflects underlying the lateral change from continental crust in the Sumatra - West Java segment, transitional (Gondwanan?) accreted crust in Central and East Java, while an oceanic island arc developed from Bali to Sumbawa and farther East (Hamilton 1978).

Mineral deposits

The magmatic arcs of Indonesia (and The Philippines, New Guinea) are hosts to numerous porphyry copper-gold and and epithermal gold-silver deposits (Figure I.3.5). Some key papers include Taylor and Van Leeuwen (1980), Carlile and Mitchell (1994), White et al. (1995), Soeria-Atmadja et al. (1998), Garwin et al. (2005), U. Hartono (2009), MacPherson and Hall (2002), Maryono et al. (2018) and others.

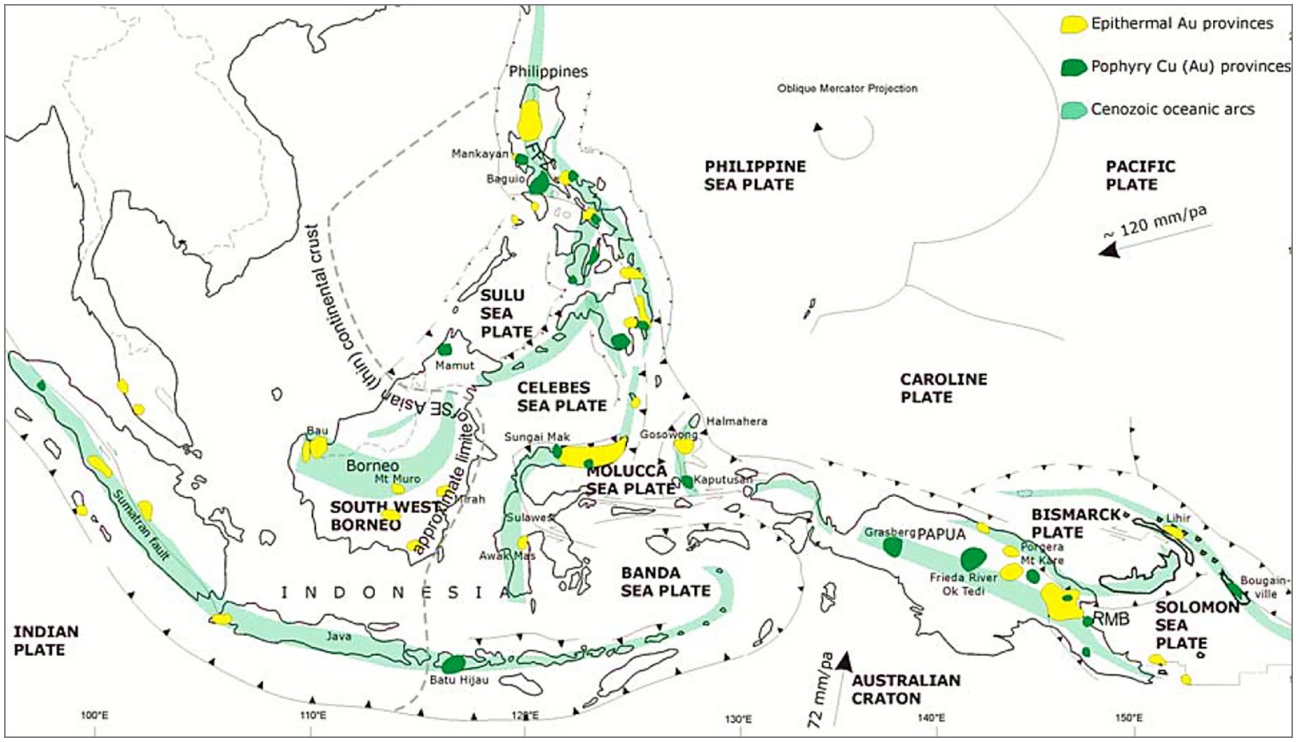


Figure I.3.5. Cenozoic volcanic arcs and main porphyry Cu-Au (green) and epithermal Au (yellow) deposits (De Waele et al. 2009)

Eight of the 15 identified volcanic-plutonic arc systems are associated with commercial mineral deposits, others may have potential (Hartono 2009).

Most of the giant Au and Cu deposits in the Indonesia - West Pacific region formed in Miocene- Pleistocene arc systems. For more detail see also Chapter XI.4.

Older Volcanic Arc systems of SE Asia- Indonesia

Most of the volcanism in the modern Sunda- Banda Arc appears to be quite young, mainly since 6-3 Ma. However, up to 15 older, extinct volcanic-plutonic arc systems have been recognized in Indonesia, dating back to Permian time (Fig. I.3.6).

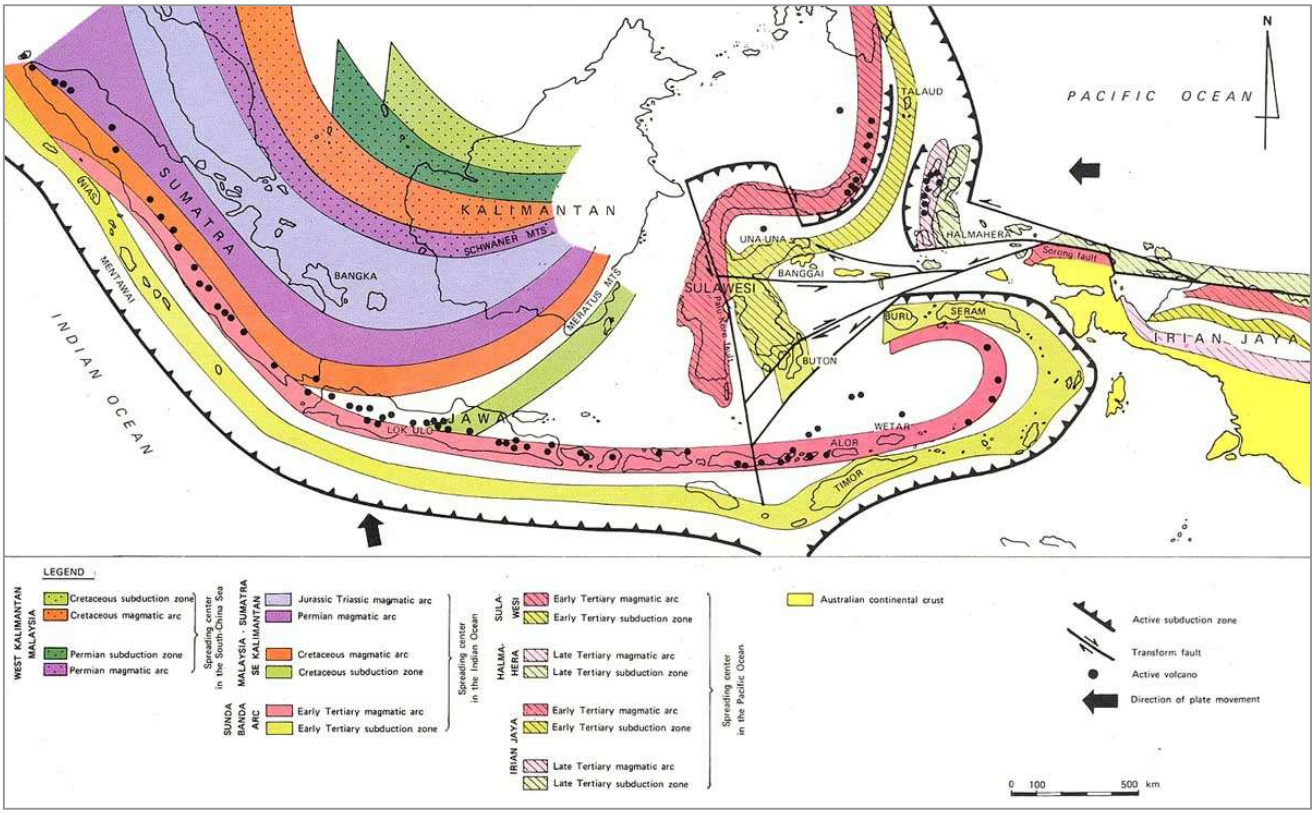


Figure I.3.6. Permian- Recent magmatic arcs/ subduction zones Indonesian Archipelago (Katili 1974).

The most prominent of the older, extinct arc systems in the Indonesian region, in order of increasing age:

1. Early Miocene East-Central Kalimantan Volcanic belt ('Kelian Volcanics'; ~23-20 Ma), >400 km long, (Abidin and Sukardi, 1997) (= Proto-South China Sea subduction from North);
2. Late Oligocene- earliest Miocene 'Old Andesites' of Sumatra and Java (= Indian Ocean- Australia plate subduction from South) (many papers, incl. Smyth 2005, Bronto 2009 and others);
3. Middle-Late Eocene 'Great Indonesian Arc' from Sumatra and Java to SW Sulawesi and displaced terranes of Sumba, and Banda Terrane of Timor (= Neotethys/ Indian Ocean subduction from South) (Charlton 2000, Harris 2006, etc.);
4. Late Cretaceous (~Campanian?) igneous- volcanic system from North Kalimantan to NW across the Anambas- Natuna area, then North to South Vietnam and the Yanshanian active margin of South China (= Paleo-Pacific subduction) (e.g. Hutchison 2005, Amiruddin 2009);
5. Late Cretaceous (mainly ~80-100 Ma) 'Sumatra-Meratus Arc', .2000 km long, from Myanmar- Andaman across West and South Sumatra, NW Java, the Java Sea into the Meratus Mountains (Figure I.3.7) (= Neotethys subduction?) (Katili 1974, Carlisle and Mitchell 1994, McCourt et al. 1996, Hartono 2012);

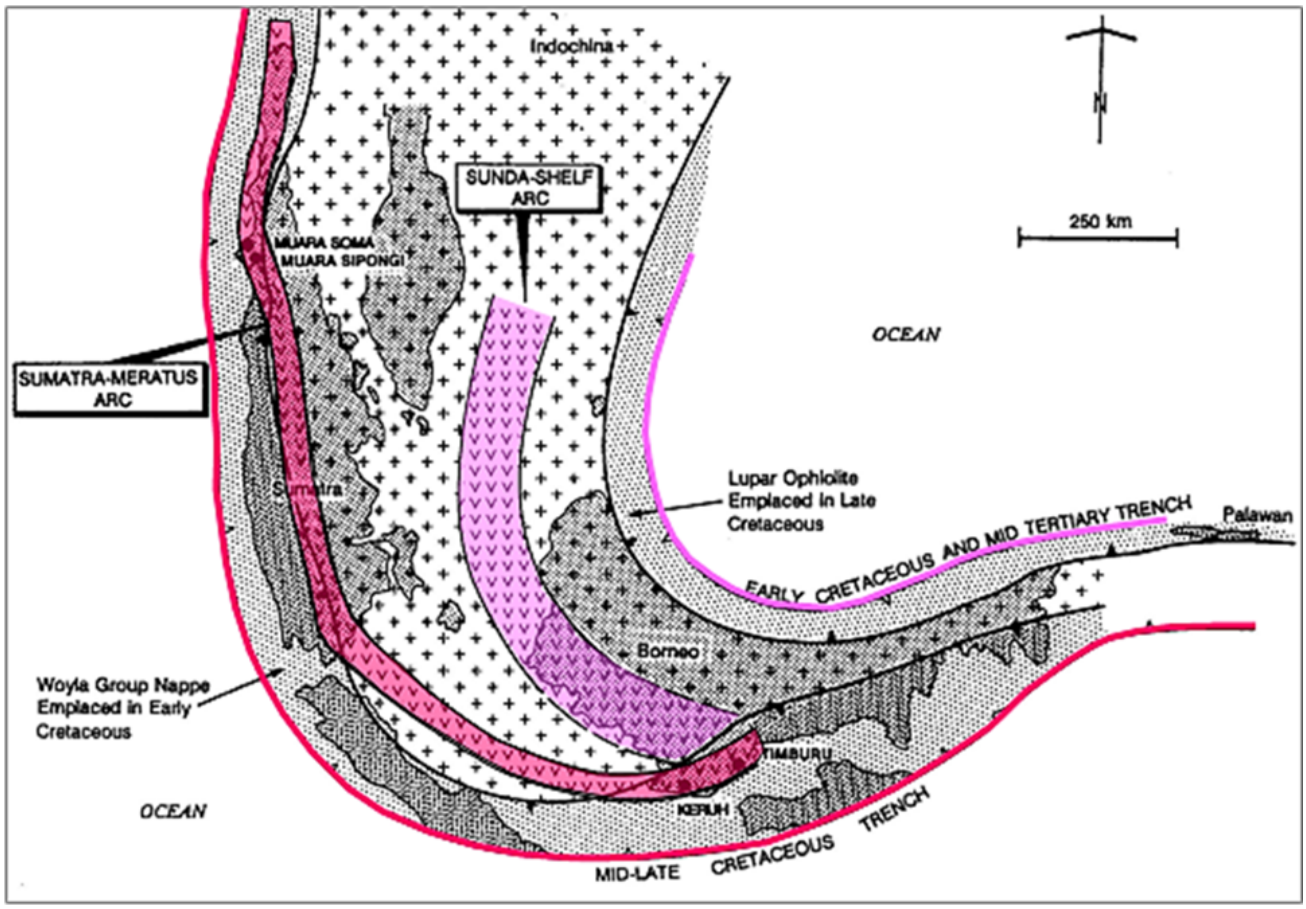


Figure I.3.7. Multiple Cretaceous magmatic arc systems of Western Indonesia, reflecting subduction from both South (Neotethys?) and North or East (Paleo-Pacific) (Carlisle & Mitchell 1994).

6. Mid-Cretaceous (Aptian- Albian) granite belt of the Schwaner Mountains granitoids of Kalimantan, also continuing NW across the Sunda Shelf, along the Indochina coast to the Yanshanian system of the East China margin (= Paleo-Pacific subduction);

7. Late Triassic (-earliest Jurassic?) belt of 'tin granites', from Thailand- Malay Peninsula and continuing into the Indonesian tin islands Bangka and Belitung (Figure I.3.8) (probably mainly post-collisional granites parallelling a slightly older Permian- Triassic arc magmatic belt linked to Paleotethys subduction) (numerous papers);

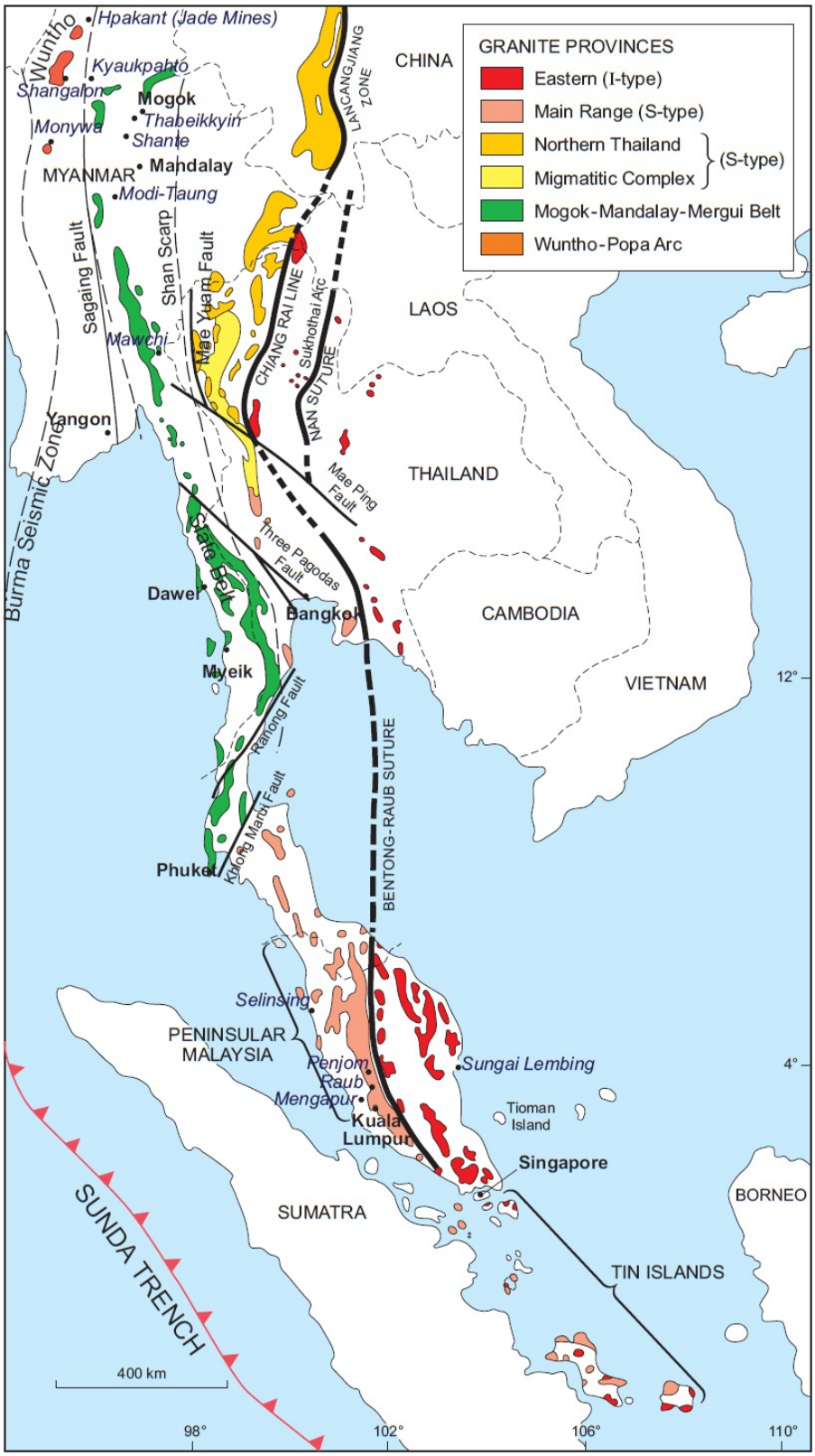


Figure I.3.8. Distribution of Late Triassic- Early Jurassic and Cretaceous tin granites (Eastern and Main Range provinces) from Myanmar, Thailand, Malay Peninsula to the Indonesian Tin Islands Singkep, Bangka and Belitung (Cobbing et al. 1986, in Searle et al. 2016).

8. Late Permian- Middle Triassic 'Gondwanan' magmatic arc, represented by a well-defined belt of granitoids that define a that extends from the East Australian/ East Gondwana active margin into New Guinea island, and into microcontinents derived from this margin like the Birds Head, Banggai-Sula (Figure I.3.9) (= Paleo-Pacific subduction) (Amiruddin 2007, 2009, Jost et al. 2018).

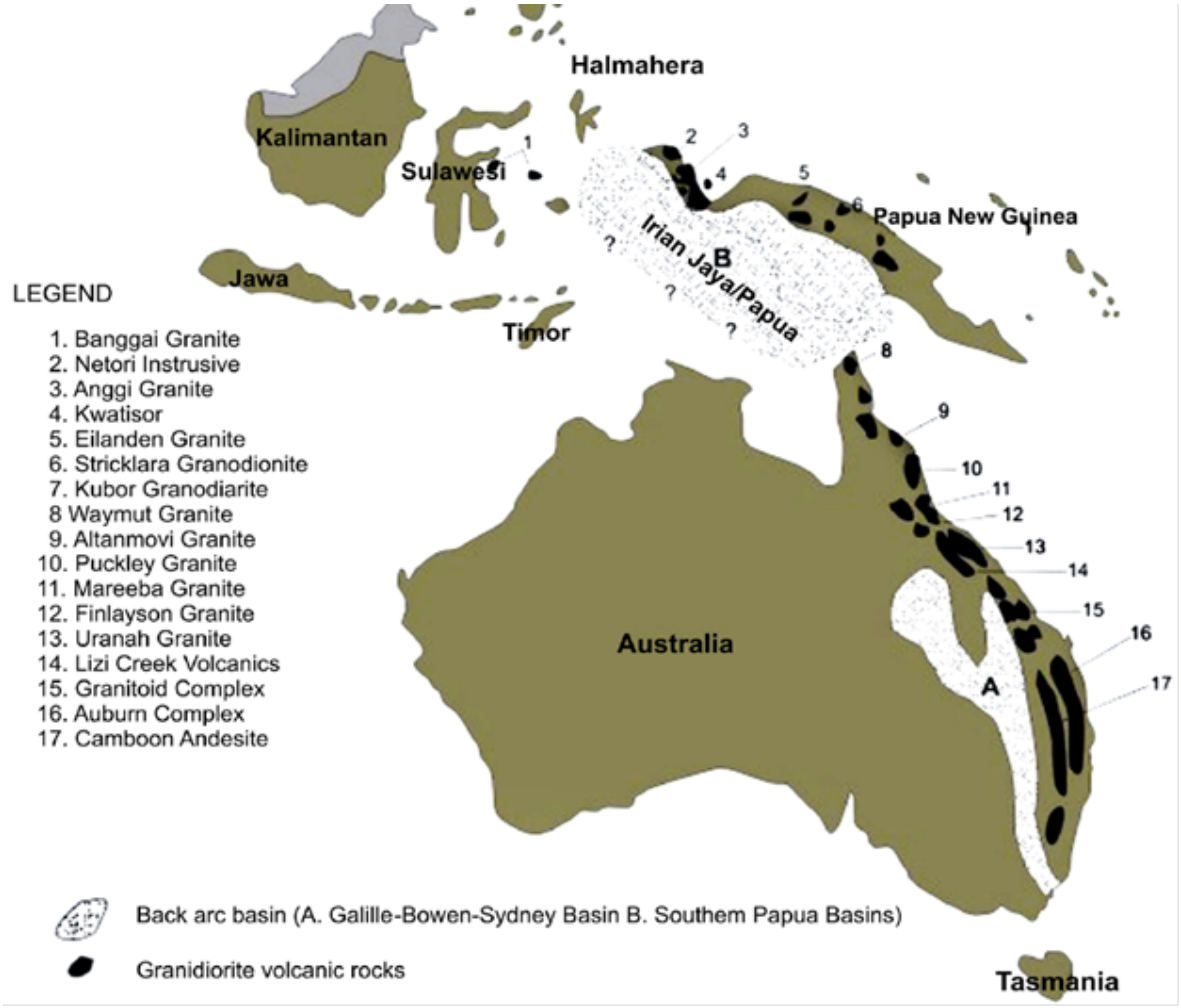


Figure I.3.9. Late Permian- Middle Triassic granitic plutons along East Australian margin, continuing into North Papua New Guinea, West Papua, Birds Head and the Banggai-Sula islands, are remnants of the same magmatic arc, reflecting Paleo-Pacific subduction along the East Gondwana margin (Amiruddin 2009).

9. Earliest Permian intermediate volcanoclastics in West Sumatra associated with the famous 'Jambi Flora' have been interpreted as part of an Early Permian volcanic arc (Figure I.3.10; Cameron et al. 1980, Pulunggono and Cameron 1984, McCourt et al. 1996). Barber and Crow (2003) suggested this was an Early Permian volcanic arc that probably formed at margin of Cathaysian Block. However, the lateral extent of these Early Permian volcanic rocks appears to be rather limited, and the presence of coal beds and rich plant fossils is not necessarily typical of volcanic arc deposits (= possible rift volcanism?).

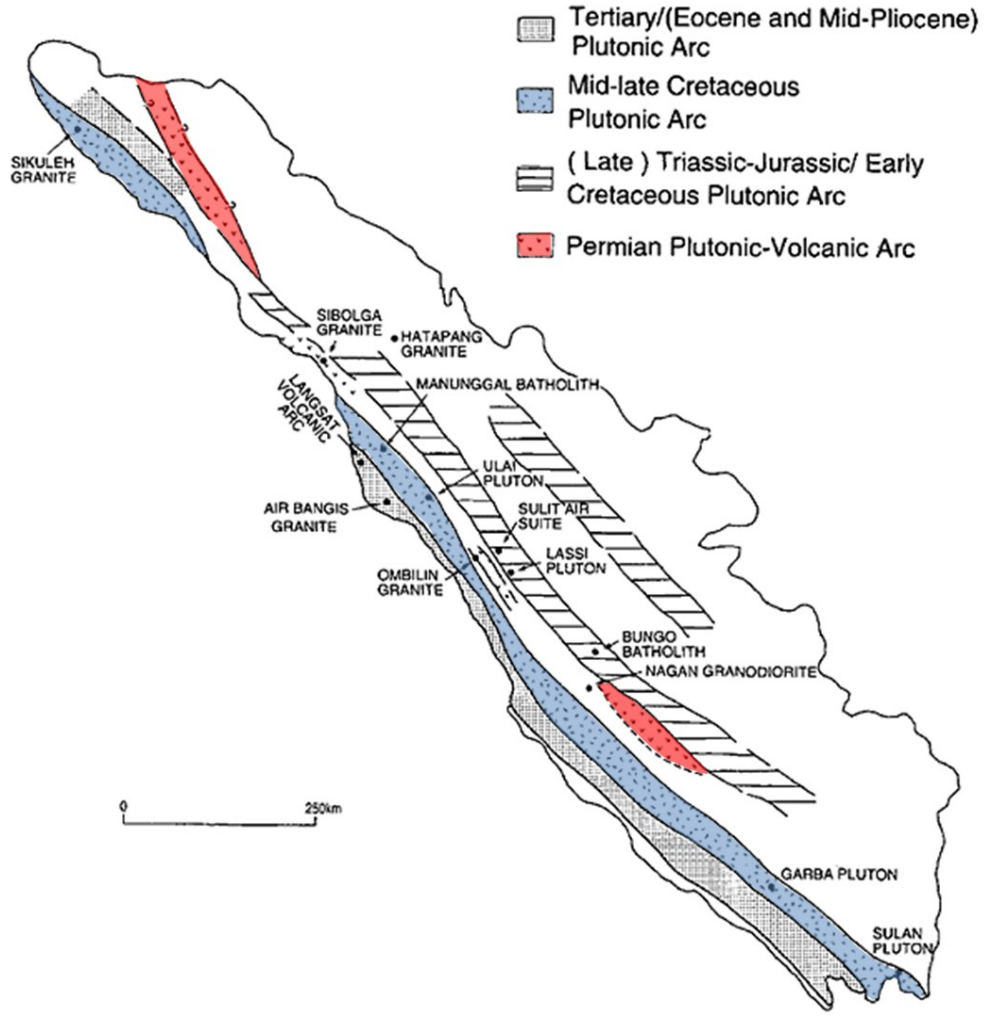


Figure I.3.10. Distribution of Permian- Tertiary magmatic arcs on Sumatra (McCourt et al 1996).

I.4. Modern environments, Oceanography

Chapter I.4 of Bibliography 7.0 contains >350 papers on modern depositional environments and processes in Indonesia. Indonesia is home to an extreme variety of environments, from glaciated mountain peaks above 4800m in the West Papua foldbelt, volcanoes up to 3800m high, to 6 km deep oceanic basins. It has been a study area for many types of modern environments, like tropical rainforests, peat swamps, coral reefs, deltas, deep marine environments, oceanography, etc..

The Indonesia/ SE Asia region is also home to some of the highest diversity land and marine life ('evolutionary hotspots'; Renema et al. 2008, De Bruyn et al. 2014).

Studies of modern enviroments are important as analogs of ancient deposits of the Indonesian region, in accordance with Lyell's fundamental geologic principle 'the present is the key to the past'. However, it should also be realized that present-day conditions of humid-tropical climate and relatively high eustatic sea-level may not be typical for much of the geologic record:

1. The present-day 'ice-house climate', with rapid eustatic sea level oscillations, existed only since the beginning of the Oligocene; most of the Triassic- Eocene deposits reflect warmer 'greenhouse' conditions;
2. The present-day eustatic sea level is relatively high, and sedentation is still adjusting to the rapid Holocene sea level rise since 18,000 years ago, which created broad flooded shelf regions;
3. Changes in faunal and floral communities;
4. Changes in plates positions and resultant oceanographic patterns: today the Indonesian region restricts oceanic circulaton between The West Pacific and Indian Oceans, but this was much less restricted before the Miocene collisions of frontal areas of the North-moving Australian continental plate.

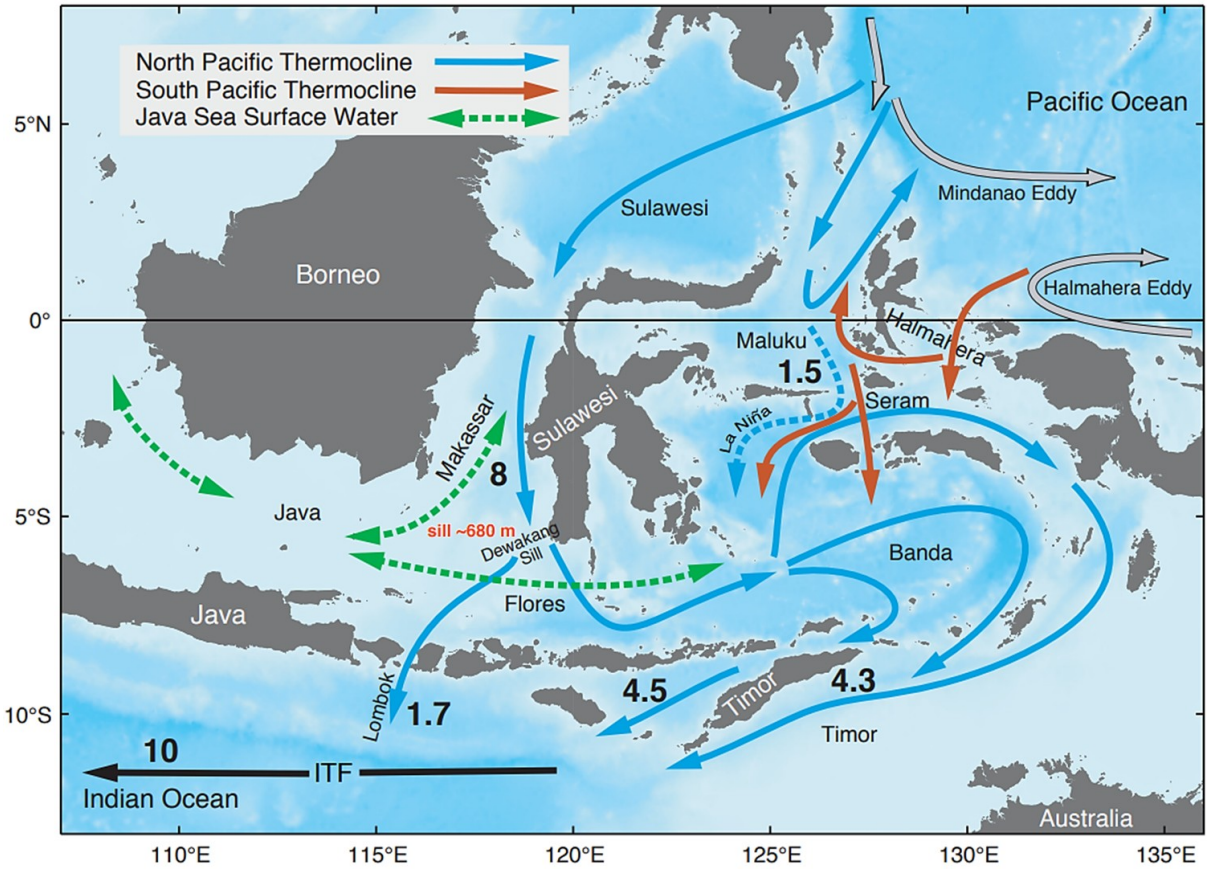


Figure I.4.1. Thermohaline circulation patterns through the Indonesian seas, dominated by 'Indonesian Throughflow' of water from Pacific Ocean to the Indian Ocean. With estimates of total volume transport in Sv (= million m3/ /second). Main inflow at Makassar Straits (8-9 Sv) and also at Lifamatola Passage West of Halmahera (1.5 Sv). Outflow through Timor Sea, Ombai (Savu Sea), and Lombok Straits (Gordon 2005)

Indonesian Throughflow

A topic of great academic interest has been the 'Indonesian Throughflow', the yearly flow of up to 15 sverdrups (>15 million m3/ second) of relatively warm and low saline Pacific Ocean water to the Indian Ocean through the Indonesian Archipelago (Figure I.4.1). The main Throughflow pathway is through Makassar Strait, then partly through Lombok Strait, partly into the South Banda Sea and exiting through the Timor and Ombai passages.

Numerous papers have been published on the oceanography of the Throughflow, a selction of which is in the current Bibliography (papers by Gordon et al., Ffield, Fieux, Godfrey, Hendrizan, Sprintall et al. Susanto et al. Waworuntu et al., and many others)

Changes in the Indonesian Throughflow probably had a significant impact on regional and global climate. The Northward movement of Australia-New Guinea in Neogene time resulted in progressive narrowing of the Indonesian seaways, causing a switch at ~3-5 Ma in the main source of water flowing through Indonesia from warm South Pacific to colder North Pacific waters. This created an area of unusually warm ocean water in the SW Pacific ('Indo-Pacific Warm Pool'; Nathan and Leckie, 2009) and decreased Indian Ocean sea surface temperatures, leading to aridification of Northern Australia and East Africa. (Cane and Molnar 2001, Srinivasan and Sinha 1998), Christensen et al. 2017).

Deltas, sediment yields

Indonesia and SE Asia are also known to host major delta systems, driven by the abundant tropical rainfall and high weathering rates and therefore high river discharge. Rivers draining the major islands of Indonesia supply 20-25% of the total sediment discharge to the world oceans although the land area that they drain is ~2% of the world total (Milliman et al.,1999). (Figure I.4.2).

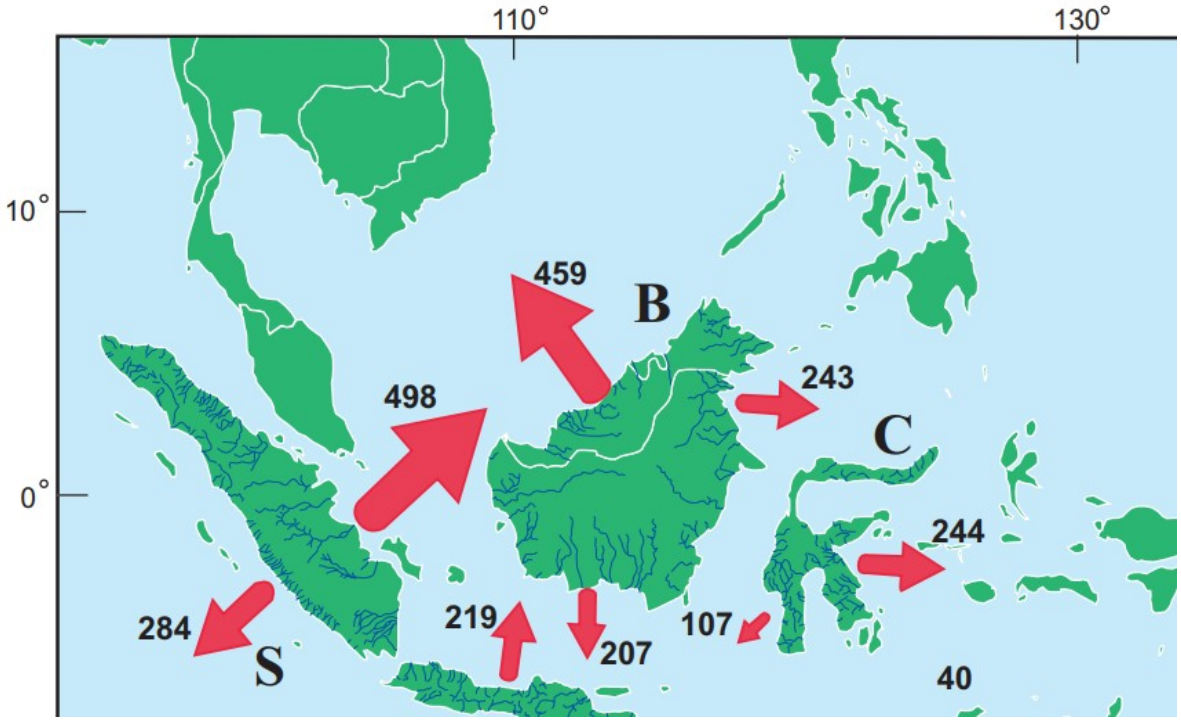


Figure I.4.2. Estimated sediment discharge (MTons/ year) from six Indonesian islands (from Milliman et al., 1999, in Nummedal et al. 2003).

The largest delta systems in the Indonesian region are found around New Guinea (Mamberamo, Fly), Borneo (Mahakam, Baram, Rajang, Barito) and Sumatra. Not all have typical delta morphologies (e.g. the NE Sumatra river deltas).

A recent review of delta systems in SE Asia is by Nummedal et al. (2003). Numerous other studies of modern deltaic sedimentation are in this Bibliography, in both this chapter and under the areas that they are in. Most studies are from the large systems of East Kalimantan and North Borneo.

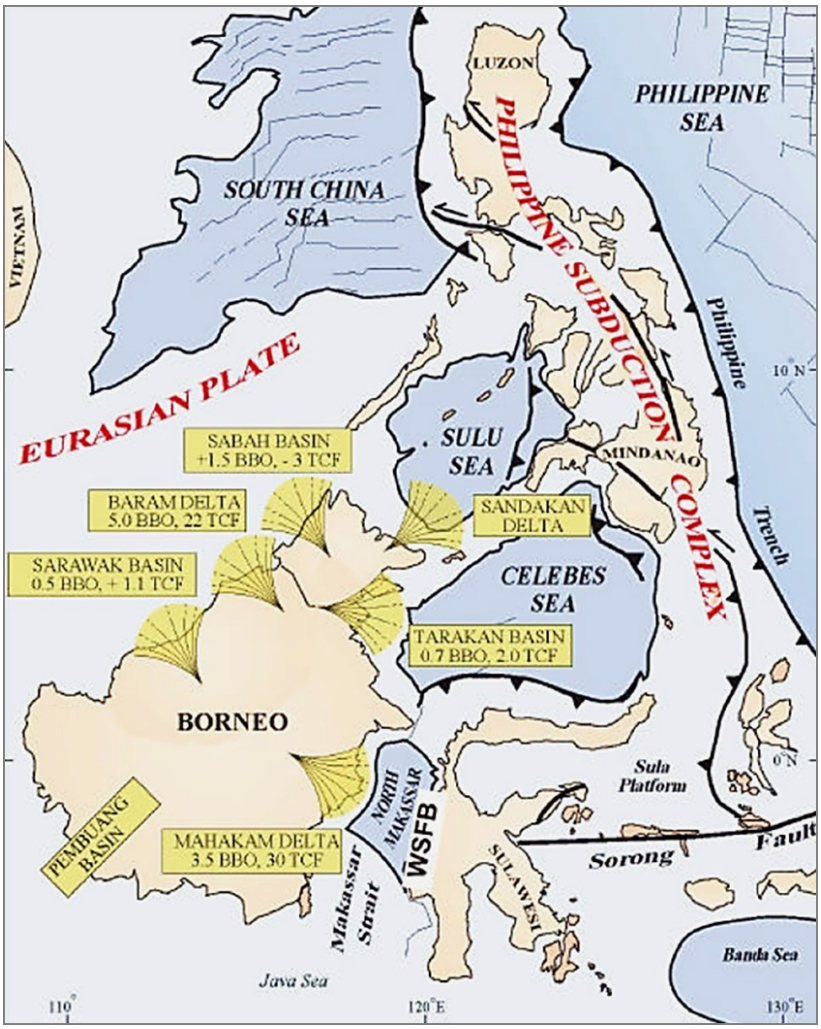


Figure I.4.3. Major delta systems around Borneo island (Graves and Swauger 1997, in Baillie et al. 2004)

Delta plains in SE Asia are typically dominated by mangrove vegetation and peat swamp forests, but in many areas the original vegetation has been severely modified by human activity (70% of mangrove areas in Mahakam delta converted to shrimp-ponds between 1980-2000).

One of the best studied modern delta systems in SE Asia is the Mahakam Delta of East Kalimantan. It is a classic example of a mixed tide-fluvial- dominated system, with relatively straight distributary channels that bifurcate in downstream direction, and with meandering tidal channels (Figure I.4.4).

A series of pioneering studies on the modern Mahakam Delta were by the late George Allen at Total (1976-1998). Other notable papers include Carbonel et al. (1987), Gastaldo et al. (1992, 1995), Roberts and Sydow (1996, 2003), Sydow (1996), Wiweko and Giriansyah (2000), Storms et al. (2005), Lambiase et al. (2010, 2015, 2017), Salahuddin Husein (2005 2011, 2013) and Bachtiar et al. (2010).

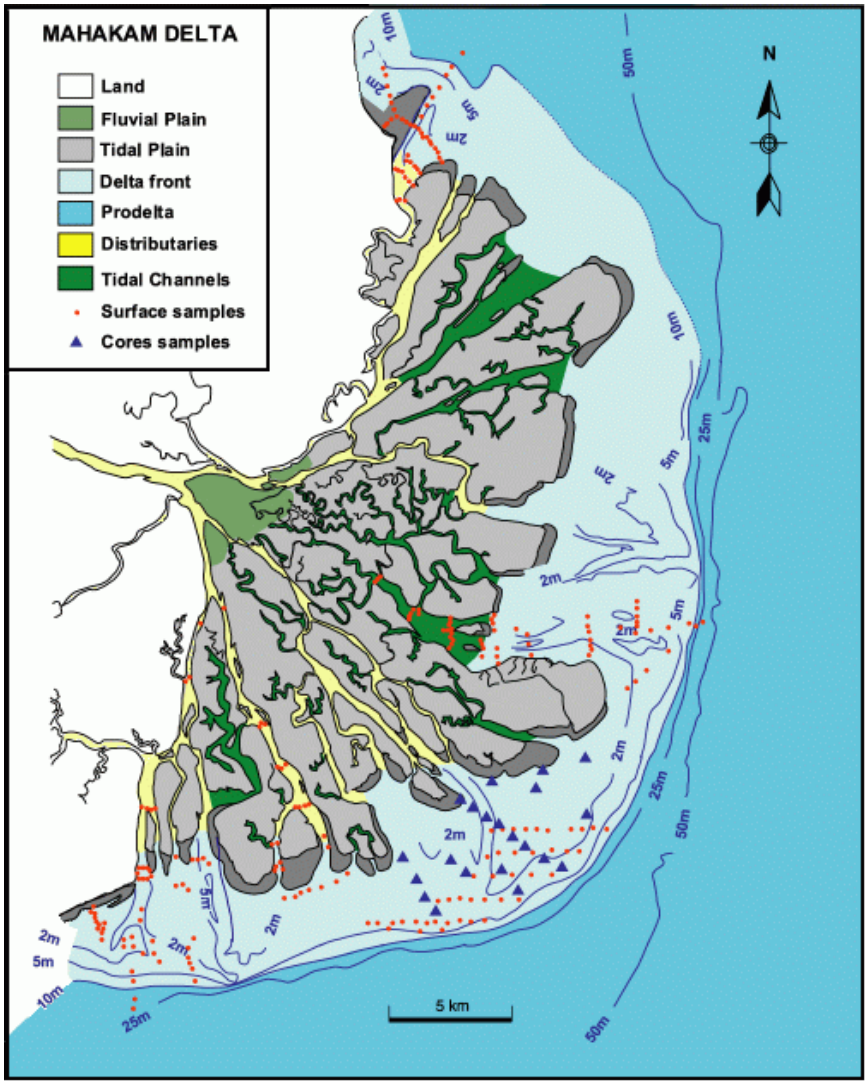


Figure I.4.4. The Mahakam Delta of East Kalimantan (figure from Lambert, 2003).

It may be noted that the modern Mahakam delta formed only in Late Holocene time, since the major sea level rise after the Last Glacial Maximum. It is a much smaller system than the underlying Middle Miocene-Pleistocene Paleo-Mahakam delta complex (e.g. Figure I.4.5.). Also, the Mahakam River/ Delta today does not feed any of the slope channels and submarine fans along the adjacent Makassar Strait margin, that are all of Pleistocene and older ages (Saller et al. 2003, 2004, 2006, 2012, 2013).

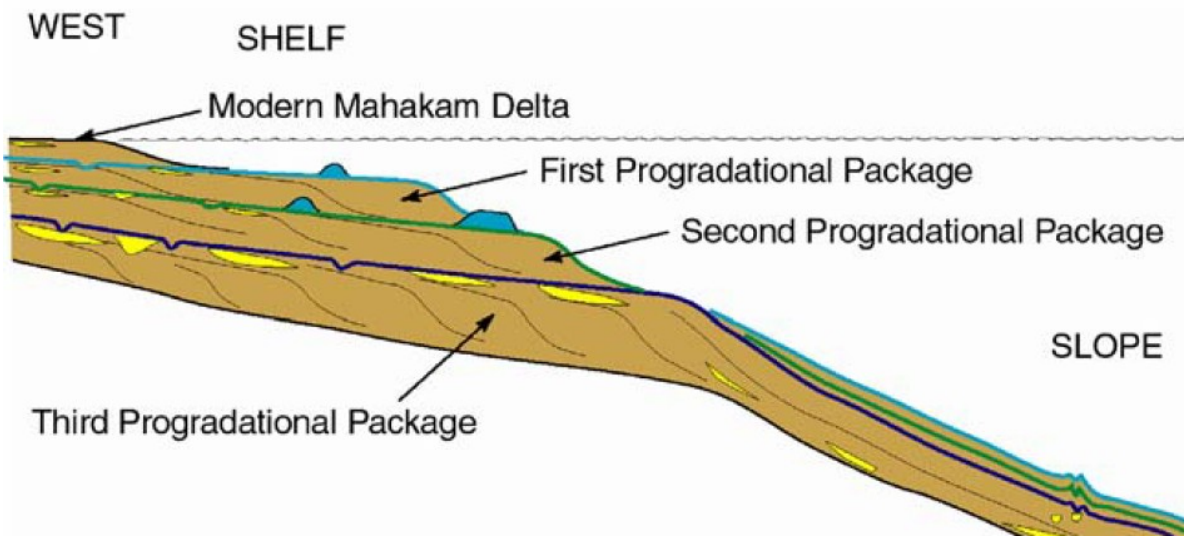


Figure I.4.5. Schematic cross section of Upper Pleistocene (0- 270 ka) stratigraphy of the offshore Mahakam Delta- Kutei basin, East Kalimantan. The modern Mahakam delta is underlain by several much larger Pleistocene 'lowstand delta' systems that extended farther basinward, and that were connected to slope channels and basin floor fan depositional systems (Saller et al. 2003).

Storms et al. (2005) noted that the present day sediment load of the Mahakam River is insufficient to explain the sediment volume of subaerial and subaqueous Mahakam delta, suggesting hydraulic conditions in the past may have been different. Geologists from Total noted that Late Miocene Paleo-Mahakam delta sediments are often coarser grained, with more high-energy fluvial flooding events, have higher sand percentages and show less tidal influence (Wiweko and Giriansyah, 2000).

Except for the Solo River delta of NE Java, fluvial-dominated 'bird-foot' deltas (but partly a man-made feature) are rare in SE Asia. Instead, most of the Indonesian deltas are heavily influenced by tidal processes (Mahakam, Rajang, Fly, Mekong), as expressed by widely flaring distributary channel mouths. The Baram Delta of NW Borneo is a wave-tide dominated delta system (Lambiase 2002 and others). Some of the small deltas along the North coast of Java are also wave dominated systems.

Most of the modern (Holocene) delta systems of Indonesia have been in their present positions only for ~6000 years, when the rate of Holocene sea level rise after the Last Glacial Maxumum lowstand started to slow down. Older Pleistocene delta systems are now buried on the Sunda Shelf and along the shelf margins (e.g. Molengraaff paleo-delta)

Pleistocene 'shelf-margin lowstand deltas'

Large, but probably relatively short-lived and now submerged 'lowstand delta' systems formed seaward of the present-day deltas around the Sundaland shelf margins during Pleistocene glacial lowstand intervals. Some of these have been studied:

- at the North edge of Sunda Shelf/ S side of South China Sea (Paleo-Mekong, Molengraaff River, Paleo-Sunda River, etc.) (Hanebuth et al. 2003)
- at the East side of Java Sea platform/ Flores Sea (Paleo-Barito?)
- at the NW end of Malacca Straits/ Andaman Sea (fed by confluent Sumatran and Malay Peninsula rivers) (Emmel and Curray 1982).
- East Kalimantan/ Makassar Straits: Paleo-Mahakam (Crumeyrolle et al. 2003, 2007).

Oligo- Miocene delta systems

Large delta systems formed along parts of the Late Oligo-Miocene margins of Sundaland and the Late Paleogene Sundaland intra-cratonic rift basins. Numerous papers on these systems are in the Bibliography, under the respective regions. These delta systems formed the main hydrocarbon reservoir formations in:

- Central Sumatra: Sihapas/ Lakat delta system(s);
- South Sumatra: Early Miocene Talang Akar delta system;
- NW Java basin: Early Miocene Talang Akar/ Lower Cibulakan delta,
- NE Java (Middle Miocene Ngrayong System)

- East Kalimantan Kutai, Sangatta and Tarakan Basins: Middle Miocene- Pliocene systems (Cibaj et al. 2006-2015) papers).

Quaternary glacial- interglacial changes

Most of Indonesia today is in the tropical- humid climate belt. This means that, without human interventions, most of the land areas would be covered by tropical lowland and montane rainforests. Numerous studies on Quaternary pollen, microfaunas and sediment types tend to agree that glacial periods were different:

1. average temperatures in equatorial regions was colder by 3-4°C during glacial periods (Verstappen 1982, Visser et al. 2003, 2004);
2. increased aridity and seasonality over most of Indonesia, causing an increase in savanna vegetation and a decrease and fragmentation of tropical rainforests (Verstappen 1975, 1976, 1982, Heaney 1991, Van der Kaars, Flenley?, Morley? Barmawidjaja et al. 1993, Gathorne-Hardy et al. 2002);
3. thinning of the vegetation cover increased physical erosion over chemical weathering, generating more coarse-grained erosional products (Verstappen 1975, 1976, 1982, Liu et al. 2012);
4. eustatic sea level was lowered by up to -125m, causing river channels incision, basinward shift in sedimentation areas, with an increase in sediments reaching the shelf edge, feeding submarine fan systems.

In the Pleistocene of Thailand the deposition of widespread alluvial fans and upland river terraces was tied to glacial periods of reduced forest cover and increased coarse sediment production. A similar situation has been described from Sumatra (Verstappen 1975)

Today we live in an interglacial period of high sealevel, following a period of rapid Holocene sea level rise of probably >120m. This means that today may not be typical of most of geologic time:

- land areas are rimmed by relatively wide continental shelves, which are drowned lowstand floodplains;
- relatively widespread Holocene reefal carbonate provinces, brackish mangrove and freshwater peat swamps;
- little or no land-derived sediment reaches the outer shelf and deep marine basins (e.g. Gayet et al. 1990).

I.5. SE Asia Carbonates, Coral Reefs

This sub-chapter I.5 of Bibliography 7.0 contains 260 papers on both modern carbonate depositional environments and carbonate distribution in the fossil record of SE Asia. Many additional papers on carbonate formations are in the chapters of the regions in which they are located.

Modern coral reefs/ carbonates

Modern corals and coral reefs are widespread across Indonesia/ SE Asia. In fact, Eastern Indonesia is commonly viewed as a marine 'center of origin', meaning the area of highest biodiversity of corals and other marine life (Figure I.5.1; Bellwood et al. 2005, Keith et al. 2013 and others). Some authrs claimed over 500 coral species to be present in the Indonesian region (e.g. Bellwood 2005), but after some recent taxonomic revisions that number may be closer to 320 species (Johnson et al. 2015).

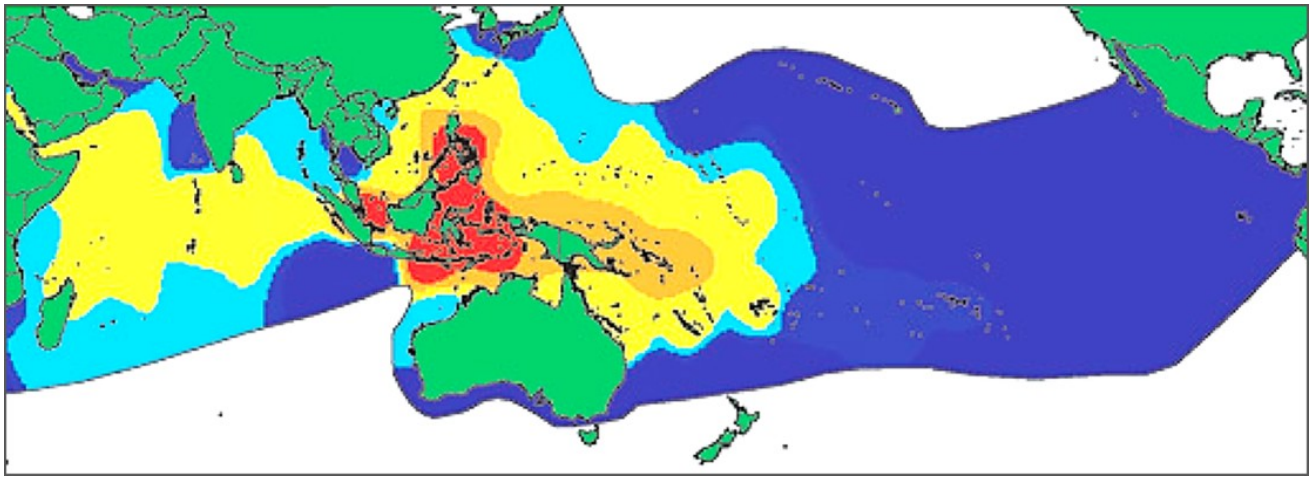


Figure I.5.1. The East Indonesia- South China Sea- Philippines 'hotspot' area boasts the highest number of coral species in the world (red area= >500 species; Bellwood et al. 2005).

The Indonesia archipelago has long been a research area for the study of modern coral reefs. The most comprehensive review of modern coral reefs at 31 areas across Indonesia is by Kuenen (1933). Other early papers were by Wichmann (1912), Molengraaff (1922, 1930), Gerth (1925, 1930), Verweij (1930, 1931), and Umbgrove (1928-1947). More recent studies of coral reefs from a geological perspective include Scrutton (1975, 1976), Longman et al. (1993), Jordan (1998), Park et al. (2010), etc..

Corals are known to thrive primarily in tropical, shallow marine waters (photic zone; typically <40-100m water depth; Verweij 1930, 1931) that are clear and of normal salinity. Modern reefs are generally not found far outside ~32° North and South of the Equator, but some Paleogene-Miocene reef corals appear more widely distributed than today (up to ~50°N; Gerth 1930).

Coral reefs generally do not develop near rivers/ deltas, due to the influx of muddy sediments, nutrients and fresh water, in areas that may be viewed as marine 'ecological deserts'. Excessive wave actions also inhibits coral growth (Moll 1986).

Some coral species, especially solitary corals, survive in deep water, as was demonstrated by dredgings of the Challenger and Snellius marine expeditions in Indonesian deep waters in the late 1800's and early 1900's.

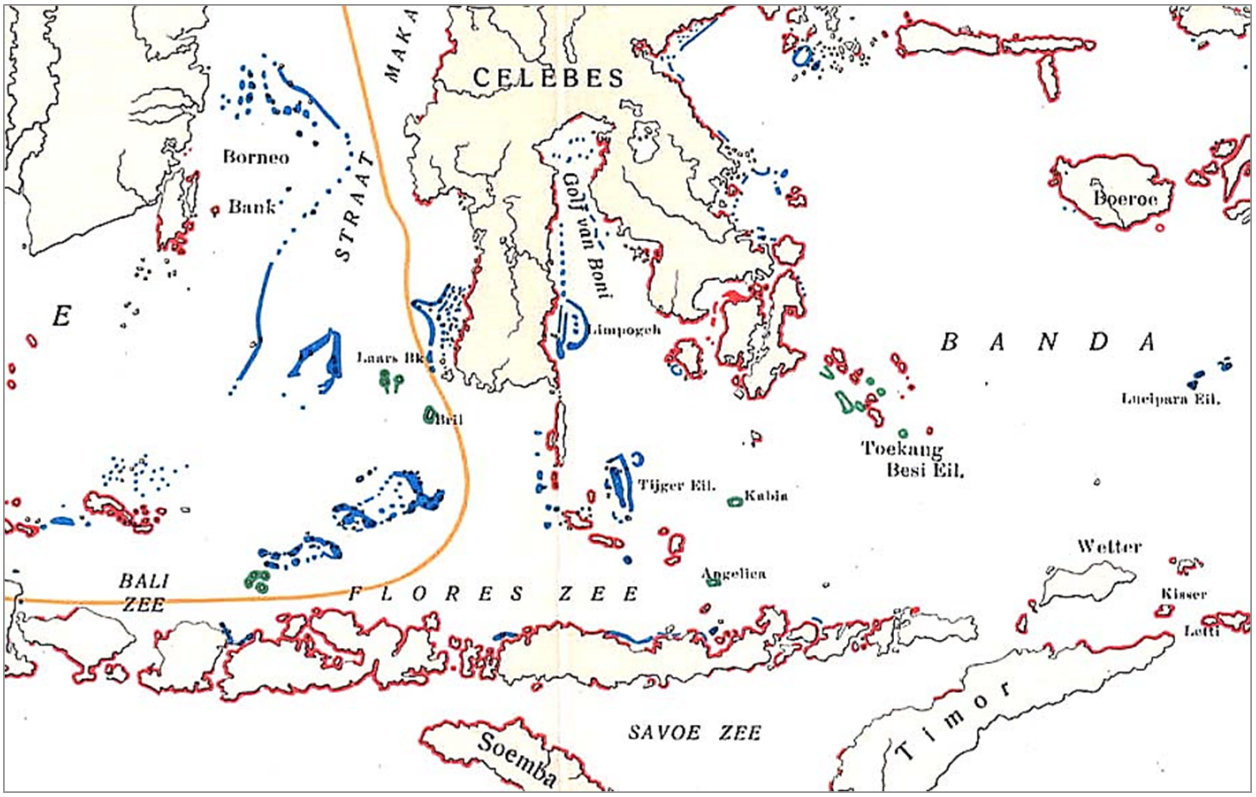


Figure I.5.2. Detail of Molengraaff (1922) map of modern distribution of coral reefs, all formed as response to recent sea level rise. Uplifted coral reefs are common East of the yellow line. Red = fringing reefs, Blue = barrier reefs and atolls

During some time intervals, or in certain areas, carbonates formed that are dominated by other organisms:

1. Larger foraminifera banks: Eocene- Oligocene limestones in Indonesia are often dominated by larger foraminifera, with or without coralline algae (Wilson and Rosen 1998). Examples include Eocene *Nummulites* limestones and Permian fusulinid limestones. Such facies have been called 'foramol' by Wilson and Vecsei (2005))
2. *Halimeda*- algae buildups: The presence of modern *Halimeda* reefs in the East Java Sea were attributed to high-nutrient influx from upwelling along the Indonesian Throughflow (Roberts)
3. Carbonates dominated by rhodolit algae appear to be relatively common, or dominant, in the Middle Miocene of the tropical Pacific and Indonesia (Bourrouilh and Hottinger 1988, Halfar and Mutti 2005);
4. Sponge- microbial reefs are most common in Triassic and Jurassic times.

Tertiary carbonates

Tertiary carbonates are widespread across Indonesia, especially of Late Eocene and latest Oligocene- Middle Miocene ages. Numerous papers on these formations are in the Bibliography, either in this chapter, but mainly under the respective regions.

Comprehensive overviews of the Tertiary limestones in the Indonesian region are by Moyra Wilson (2002, 2008, 2011, 2012, etc.). Other 'classics' include Fulthorpe and Schlanger (1989),

There are numerous oil and gas fields in Oligocene-Miocene reefal buildup reservoirs in the Cenozoic basins of Indonesia: Natuna Basin, North and South Sumatra, NW Java, East Java, Java Sea, West Sulawesi, East Kalimantan, Makassar Straits, West Papua). Similar carbonate plays are found around Indonesia: offshore Sarawak (Luconia province), The Philippines, offshore Vietnam and the Gulf of Papua. Renewed interest in Tertiary reefal limestone exploration came with new oil and gas discoveries in the East Java Basin in the early 2000's.

Miocene carbonate buildups and platforms are also known from the margins of NW Australia (Davies et al. 1989) and NE Australia (Ehrenberg 2004, 2006, Eberli et al. 2010), but no hydrocarbon accumulations have been identified there yet.

Pre-Tertiary carbonates

Pre-Tertiary carbonates are relatively rare in Indonesia. Most of the references on individual carbonates are found in the chapters on areas in which they occur.

Late Carboniferous- Permian

Late Carboniferous- Permian limestones with fusulinid foraminifera are known from Sumatra, Kalimantan, West Sarawak (Terbat Limestone) and Timor (papers by Fontaine, etc.).

The Early-Middle Permian of West Sumatra includes probably the only true reefal Permian limestones in Indonesia (Guguk Bulat, W Sumatra).

Late Triassic

Across the Tethys region Triassic sponge and coral reefal limestones are most common in the Norian and Rhaetian (Flugel 1982, 2002, Bernecker 2005,). This observation may also be valid for the Indonesian region.

Late Triassic shallow water carbonates have been reported from Sumatra (Gafoer and Fontaine 1989), Bangka (De Neve and De Roever 1947), 'Fatu Limestones' of Timor (Vinassa de Regny 1915, Flugel 2002, Haig et al. 2007), East Sulawesi (Cornee et al. 1994, 1995, Martini et al. 1997), Buru (Gerth 1910, Wanner 1923), Seram (Wanner et al. 1952, Martini et al. 2004), Banda Sea (Sinta Ridge ;Villeneuve et al. 1994) and the Kubor terrane of Papua New Guinea (Skwarko et al. 1976, Kristan-Tollman 1986, 1989).

Fractured Upper Triassic limestones are hydrocarbon reservoirs on Seram Island (Kemp et al. 1992, 1995, Nilandaroe et al. 2001, 2005) (but commonly erroneously called Jurassic; Charlton and Van Gorsel 2014).

Late Jurassic

Late Jurassic muddy carbonate mounds and are present in West Sumatra (Beauvais et al. 1985, Gafoer and Fontaine 1989) and NW Kalimantan- SW Sarawak (Bau Limestone). Deep water pelagic limestones of these ages, often with calpionellids, are relatively widespread across Eastern Indonesia (East Sulawesi, Timor, Seram, Buru, etc.).

Early Cretaceous

Early Cretaceous shallow marine carbonates with *Orbitolina* are known from West and South Sumatra ('Woyla Terranes'), Central Java and Kalimantan.

I.1. INDONESIA REGIONAL GEOLOGY

I.1. Indonesia Regional Geology

Aadland, A.J. & R.S.K. Phoa (eds.) (1981)- Geothermal gradient map of Indonesia, 2nd edition. Indonesian Petroleum Association (IPA), Special Publ., p. 1-43.
(Compilation of temperature data from petroleum wells in Indonesia. With two map sheets 1: 2,500,000. See also updated version by Thamrin & Mey, 1987)

Abdurrachman, M., S. Widiyantoro & M.Z.A. Alim (2018)- New model of Wadati-Benioff Zone in Java-Sumatra subduction system and its tectonic implication. In: Petrogenesis and Exploration of the Earth's Interior, Proc. 1st Springer Conference Arabian J. of Geosciences (CAJG 2018), Tunisia 2018, p. 21-24.
(New Wadati-Benioff Zone model from earthquake hypocenters)

Abdurrachman, M., S. Widiyantoro, B. Priadi, M.Z.A. Alim & A.H. Dewangga (2015)- Proposed new Wadati-Benioff zone model in Java-Sumatra subduction zone and its tectonic implication. Proc. Joint Convention HAGI-IAGI-IAFMI-IATMI, Balikpapan, JCB2015-376, p. 1-4.
(online at: https://www.iagi.or.id/web/digital/3/2015_IAGI_Balikpapan_Proposed-New-Wadati.pdf)
(Previous models of Wadati Benioff Zone (derived from earthquake hypocenters) in Java- Sumatra deemed too simple. In Java hypocenter depths recorded downt to 500 km and more, while earthquakes in Sumatra all <300 km deep. In C and E Java an aseismic area between 300-500 km is interpreted as tear zone in subducting plate)

Abendanon, E.C. (1914)- Geologische schetskaart van Nederlandsch Oost-Indie, schaal 1:2,500,000. Koninklijk Nederlands Aardrijkskundig Genootschap, Smulders, 's-Gravenhage, Toelichting, p. 1-6 + 6 map sheets.
(online at: https://nl.wikipedia.org/wiki/Wikipedia:GLAM/Expedities/Mediadonaties#/media/File:UB_Utrecht_-_CARTO_II_L_2_-_1914.jpg)
('Geological overview map of the Netherlands East Indies'. First geological overview map of Indonesia, 120x225 cm, commissioned by Netherlands Royal Geographical Society- KNAG. Compiled from published and unpublished maps by many authors. Java and Sumatra rel. complete coverage, but much of Kalimantan, Sulawesi and New Guinea still mostly uncharted territories)

Abendanon, E.C. (1914)- Grossfalten im Niederlandisch-Ostindischem Archipel. In: Die Grossfalten der Erdrinde, Chapter 2, Brill, Leiden, p. 38-57.
(online at: https://catalog.hathitrust.org/Record/006573206)
('Mega-folds in the East Indies Archipelago'. Chapter in Abendanon's 183-page book on his global tectonic theory of 'mega-folds': recently uplifted mountain chains, caused by shrinking of the globe, accompanied by extensional central rifts, gravity sliding, etc. Examples of 'mega-folds' in Indonesia in Sulawesi, Timor and Sumatra. In C Sulawesi, the Mountain chain W of Lake Poso looks like almost flat peneplain now uplifted to 2000m, cut by ~N-S faults/ rift valleys like Poso Depression. Timor also recently uplifted foldbelt with central graben. Etc. Very few illustrations)

Abendanon, E.C. (1915)- De geologie van den Indischen Archipel. In: De natuurlijke gesteldheid van den Indischen Archipel, Nederlandsch Onderwijzers-Genootschap, W. Versluys, Amsterdam, p. 26-42.
(online at: https://uvaerfgoed.nl//beeldbank/xview?identifier=hdl:11245/3.38184)
('The geology of the Indies Archipelago'. Brief overview; probably summary in lecture series or Dutch Teachers Society on the 'natural state of the Indies Archipelago'. No figures)

Abendanon, E.C. (1915)- De geotektonische positie van de Nederlandsch-Indischen Archipel. In: Handelingen XV Nederlandsch Natuur- Geneeskundig Congres, Kleynenberg, Haarlem, p. 510-523.
('The geotectonic position of the Netherlands Indies Archipelago'. Old tectonic hypotheses of Abendanon including idea that distribution of old schists across Indonesia suggests that in geologically early periods the entire Indonesian Archipelago was occupied by mainland with high mountain chains. In C Sulawesi old fold trends E-W, Neogene folding more N-S trending. Whimsical shapes of Sulawesi and Halmahera can be explained by their location at junction of three geotectonic components)

Abendanon, E.C. (1919)- Aequinoctia, an old Palaeozoic continent. Journal of Geology 27, 7, p. 562-578.
(Early tectonic interpretation of tectonics of Indonesia. Presence of crystalline schists across E Indonesia suggests area from Borneo to New Guinea may all have been parts of one ancient continent, here named Aequinoctia, It extended from Sulawesi to Tasmania)

Adinegoro, A.R. Udin (1973)- Stratigraphic studies by the Indonesian Petroleum Institute (LEMIGAS). United Nations ECAFE, CCOP, Technical Bulletin 7, p. 55-74. *(online at: https://repository.unescap.org/server/api/core/bitstreams/02824758-88df-4f2d-a237-e8aa33c9b57e/content)*
(Review of Cenozoic stratigraphic successions in NE Java, Jambi-Sumatra, NE Sumatra and E Kalimantan. One of first attempts to tie Indonesian basin stratigraphies to global low latitude planktonic foram zonations)

Advokaat, E.L. & D.J.J. van Hinsbergen (2024)- Finding Argoland: reconstructing a lost continent in SE Asia. Gondwana Research 128, p. 161-263.
(online at: https://www.sciencedirect.com/science/article/pii/S1342937X23002769)
(Argoland is conceptual continent that must have broken off NW Australian margin in Late Jurassic and migrated N, to end up somewhere in SE Asia. Previously identified fragments too small to represent all of Argoland, and were once separated by oceanic basins older than Late Jurassic. Gondwana-derived units that collectively may represent Argoland, now found between relics of Late Triassic-M Jurassic oceanic basins, all pre-dating break-up of Argoland. Reconstruction suggests 'Argoland block' that broke off NW Australia in Late Jurassic was collage of continental fragments and pre-Late Jurassic intervening oceanic basins)

Alam, S., M.S.D. Hadian, A.H. Hamdani & N. Sulaiman (2025)- Enhancing in search of Milankovitch cycles from stratigraphic record using convex optimization algorithm. Nature Scientific Reports 15, 1099, p. 1-15.
(online at: https://www.nature.com/articles/s41598-024-82720-0)
(New algorithm to evaluate 405-kyr, 100-kyr (long and short eccentricity), 41-kyr (obliquity), and 21-kyr (precession) Milankovitch cyclicity in (1) M Miocene Nyalindung Fm molluscan beds of Java (41 ky obliquity dominant); (2) M Miocene deltaic deposits of Mahakam Delta in E Kalimantan (obliquity dominant); (3) Pleistocene sediments with hominins on Flores and (4) Pleistocene lacustrine beds of Towuti Lake in Sulawesi (105 ky eccentricity dominant))

Ali, J.R. & R. Hall (1995)- Evolution of the boundary between the Philippine Sea plate and Australia: paleomagnetic evidence from eastern Indonesia. Tectonophysics 251, p. 251-275.
(online at: https://www.academia.edu/80887947/Evolution_of_the_boundary_between_the_Philippine_Sea_Plate_and_Australia_palaeomagnetic_evidence_from_eastern_Indonesia)
(New paleomag data from Sorong Fault Zone and Obi and Taliabu (Sula) islands. Coniacian- Santonian paleolatitude at 19°± 6°, similar to results from Misool, suggesting Sula/Taliabu and Misool were parts of single microcontinent, but >10° farther N than expected if attached to N Australian margin, implying region separated from Australia before Late Cretaceous. Obi contains rocks of Philippine Sea and Australian origin. Volcanic arc at S edge Philippine Sea Plate collided with New Guinea at ~25 Ma, changing Philippine Sea-Australian plate boundary from subduction to strike-slip)

Ali, J.R., S.J. Roberts & R. Hall (1994)- The closure of the Indo-Pacific ocean gateway: a new plate tectonic perspective. In: F. Hehuwat et al. (eds.) Proc. Int. Workshop Neogene evolution of Pacific Ocean gateways, IGCP-355, Bandar Lampung 1993, p. 10-20.
(online at: http://searg.rhul.ac.uk/pubs/ali_etal_1993_Indo-Pacific_Gateway.pdf)
(Reconstructions of W Pacific 45-10 Ma. Area N of Sorong Fault Zone ~40° CW rotation and 15° N-ward motion since ~25 Ma. Prior to 22 Ma collision between Australia (New Guinea) - Philippine Sea open Equatorial seaway between Indian and Pacific oceans. Connection mostly closed by initiation of Halmahera Arc at 11 Ma)

Alzwar, M. (1986)- Geothermal energy potential related to active volcanism in Indonesia. Geothermics 15, p. 601-607.
(90 geothermal areas identified in Indonesia, mostly located within active volcanic belts)

Amiruddin & S. Andimangga (2007)- Permo-Triassic magmatic arc and back arc basins of Gondwana land with reference of Eastern Indonesia, Papua New Guinea and Eastern Australia. Proc. Joint Convention 32nd HAGI, 36th IAGI and 29th IATMI, Bali 2007, JCB2007-019, p. 101-102 *(Abstract only) (online at: https://www.iagi.or.id/web/digital/28/2007_IAGI-Bali_Permo-Triassic-Magmatic-Arc-and-Back-Arc.pdf)*
(Permian-Triassic granitoid plutons and volcanics exposed in E Indonesia, in belt from Banggai Sula in W through Birds Head (Netoni, Anggi, Maransabadi), Birds Neck, Central Range of W Papua (Eilanden, Idenburg) to PNG (Strickland and Kubor Granodiorites) in E, then belt continues S to E Australia through Cape York, NE Queensland to New England Fault Belt. Syn-collision and volcanic arc I and S-type granites)

Amiruddin (2009)- A review on Permian to Triassic active or convergent margin in southeasternmost Gondwanaland: possibility of exploration target for tin and hydrocarbon deposits in the Eastern Indonesia. Jurnal Geologi Indonesia 4, 1, p. 31-41.
(online at: https://ijog.geologi.esdm.go.id/index.php/IJOG/article/view/68/68
(Permian-Triassic magmatic-volcanic belts signify active Paleo-Pacific margin along New Guinea (Banggai, Netori, Anggi, Kwatisor, Kubor, etc. granites), continuing to E Australia margin of SE Gondwanaland. Granitic plutons S- type and may be tin-bearing. Back-arc basins of S Papua and Galilee-Bowen-Gunnedah-Sydney basins filled by fluvial, fluvio-deltaic to marine Permian-Triassic sediments, locally with coal, unconformably overlain by marine Jurassic-Cretaceous)

Anderson, R.N. (1980)- Update of heat flow in the East and Southeast Asian seas. In: D.E. Hayes (ed.) The tectonic and geologic evolution of Southeast Asian seas and islands, 1, American Geophysical Union (AGU), Geophysical Monograph Series 23, p. 319-326.

Angelich, M.T., R.L. Brovey, M.E. Ruder & C.C. Wielchowsky (1986)- Use of Seasat-derived free-air gravity to interpret the structure of Southeast Asia. Proc. 15th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, 1, p. 1-18.
(In areas of low sea-bottom relief SEASAT-derived gravity data can be treated qualitatively as low-pass-filtered Bouguer gravity field. Examples from SE Asia)

Astjario, P. (1995)- A study of the uplifted coral reef terraces in the eastern part of Indonesia. In: J. Ringis (ed.) Proc. 31st Session Committee Co-ord. Joint Prospecting Mineral Resources in Asian Offshore Areas (CCOP), Kuala Lumpur 1994, 2, p. 116-121.
(online at: https://repository.unescap.org/server/api/core/bitstreams/4198bc42-86c9-49fe-843e-60aebea03e54/content)
(Brief review of Quaternary uplifted coral reef terraces on Sumba, W Timor, E Sulawesi and Buton)

Atkinson, C., T. Wain, H. Sugiatno & S. Hayes (2017)- Hidden basins and undrilled anticlines: the legacy of early oil exploration in Indonesia. SEAPEX Exploration Conference 2017, 9, Singapore, p. 1-36.

Audley-Charles, M.G. (1965)- Permian palaeogeography of the northern Australia-Timor region. Palaeogeogr. Palaeoclim. Palaeoecology 1, p. 297-305.
('Autochthonous' Permian rocks of Timor believed to be detritus from Kimberley region of N Australia. This conflicts with suggestions of large crustal dislocations immediately N of Australia recently advocated on basis of regional paleomagnetic studies)

Audley-Charles, M.G. (1966)- Mesozoic palaeogeography of Australasia. Palaeogeogr. Palaeoclim. Palaeoecology 2, p. 1-25.
(Broad Triassic- Cretaceous paleogeographic sketch maps of Indonesia- N Australian region, following recent studies on Timor. Rather different from more recent work (incl. Audley-Charles 1988, etc.; e.g. conclusions: 'the spatial relationships between N Australia, Timor and the other parts of the archipelago have not greatly altered since the Middle Triassic' and 'the contention of some authors that continental drift has occurred between the N coast of Australia and SE Asia, is strongly contradicted by stratigraphic evidence, and by paleogeographic history of the region as developed in this article')

Audley-Charles, M.G. (1976)- Mesozoic evolution of the margins of Tethys in Indonesia and The Philippines. Proc. 5th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, 2, p. 25-52.

Audley-Charles, M.G. (1978)- The Indonesian and Philippine archipelagoes. In: M. Moullade & A.E.M. Nairn (eds.) The Phanerozoic geology of the world, II, The Mesozoic, Elsevier, p. 165-207.

Audley-Charles, M.G. (1981)- Geological history of the region of Wallace's Line. In: T.C. Whitmore (ed.) Wallace's Line and plate tectonics. Clarendon Press, Oxford, p. 5-25.

Audley-Charles, M.G., D.J. Carter & A.J. Barber (1974)- Stratigraphic basis for tectonic interpretations of the Outer Banda Arc, Eastern Indonesia. Proc. 3rd Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, p. 25-44.
(Outer Banda Arc islands (Timor, Tanimbar, etc.) are imbricated N margin of Australian shelf and slope on which overthrust Asian elements and major olistostrome have been superimposed, all emplaced from N)

Audley-Charles, M.G., D.J. Carter & J.S. Milsom (1972)- Tectonic development of Eastern Indonesia in relation to Gondwanaland dispersal. Nature Physical Science 239, 90, p. 35-39.
(Reconstruction of Banda Arc region. Timor formed part of Australian continental margin since at least E Permian. Unusual Early Cretaceous reconstruction with Borneo- W Sulawesi- Sumatra- Java- Indochina and India all still part of Gondwanaland and attached to W Australia))

Bachri, S. (2013)- Peran system tunjaman, sesar mendatar transform dan pemekaran terhadap sebaran cekungan sedimen di Indonesia. Jurnal Geologi dan Sumberdaya Mineral (JGSM) 14, 1, p. 19-27.
(online at: https://jgsm.geologi.esdm.go.id/index.php/JGSM/article/view/75)
('The role of subduction systems, transform faults and rifting in the distribution of sedimentary basins in Indonesia'. Basins in W dominated by Tertiary basins and mainly controlled by subduction systems. In E Indonesia Pre-Tertiary and Tertiary basins with semi-concentric pattern and random pattern, controlled transform faults and transport of continental plates originating from Australia)

Badings, H.H. (1936)- Het Palaeogeen in den Indischen Archipel. Verhandelingen Geologisch-Mijnbouwkundig Genootschap Nederland Kolonien, Geologische Serie 11, 3, p. 233-292.
('The Paleogene in the Indies Archipelago'. Overview of Paleogene sediments in Indonesia and Philippines. With outcrop distribution/ basic paleogeographic maps for Tertiary a, b, c and d (Eocene- Oligocene). Useful compilation, but harshly criticized in series of papers by Van Bemmelen, Koolhoven, Ubaghs, etc. in 1936)

Baillie, P., J. Decker, D. Orange, P. Teas & N. Wagimin (2009)- IndoDeep: new insights into the geology of Indonesia. Proc. 2009 SE Asia Petroleum Exploration Society (SEAPEX) Conference, Singapore, p. 1-50. *(Abstract + Presentation)*
(Three 'conventional' paradigms in areas of TGS IndoDeep project: (1) Sumatra fore-arc unprospective, (2) not sufficient sediment thickness in Bone Bay to have generated hydrocarbons; (3) Cenderawasih Bay underlain by oceanic crust and unprospective (Pretty pictures of seismic lines and seafloor bathymetry but no explanations of any changing insights; JTvG))

Baker, S., R. Hall & E. Forde (1994)- Geology and jungle fieldwork in Eastern Indonesia. Geology Today 10, 1, p. 18-23.
(Brief account on fieldwork on coastal outcrops of Halmahera region by University of London)

Balazs, D. (1968)- Karst regions in Indonesia. Karszt-Es Barlangkutatas 5, Budapest, Globus nyomda, p. 3-57.
(online at: https://real-j.mtak.hu/19814/1/karszt_es_barlangkutatas_1963-1967_05.pdf)
(Review of limestone karst development in Indonesia (mainly in Tertiary limestones). Tropical karst areas generally controlled by heavy torrential tropical rains and characterized by predominantly positive landforms (conical and pinnacle karst hills), while depressions (sinkholes, etc.) more common expression of dissolution in areas of slow rains in temperate belt)

Balazs, D. (1971)- Intensity of the tropical karst development based on cases of Indonesia. Karszt-Es Barlangkutatas 6, Budapest, Globus nyomda, p. 33-67.
(online at: http://epa.oszk.hu/02900/02967/00006/pdf/EPA02967_karszt_es_barlangkutatas_1968-1971_06_033-068.pdf)
(Discussion of karst weathering in Gunung Saribu (W Sumatra; Permo-Carboniferous), Gunung Sewu (S Mountains) and other localities on Java and SW Sulawesi (Maros))

Barber, A.J. (1985)- The relationship between the tectonic evolution of Southeast Asia and hydrocarbon occurrences. In: D.G. Howell (ed.) Tectonostratigraphic terranes of the Circum-Pacific region, Circum-Pacific Council Energy and Mineral Resources, 1, Houston, p. 523-528.
(SE Asia consists of cratonic Sundaland core of continental fragments that had stabilized by end-Mesozoic. Additional terranes added through Late Mesozoic- Tertiary in Sumatra, Borneo, E Indonesia and Philippines. Early Tertiary widespread extension, followed by Late Tertiary compression, resulting in favorable locations for hydrocarbon generation and accumulation)

Barber, A.J. (1993)- Dispersion, subduction and collision in Eastern Indonesia. Proc. 22nd Annual Conv. Indonesian Association Geologists (IAGI), Bandung, 1, p. 23. *(Keynote Abstract)*
(online at: https://www.iagi.or.id/web/digital/61/4.pdf)

Barber, A.J. (2013)- The origin of melanges: cautionary tales from Indonesia. J. Asian Earth Sciences 76, p. 428-438.
(online at: http://searg.rhul.ac.uk/pubs/barber_2013%20Indonesian%20melanges.pdf)
(Description of two examples of melanges, from Banda arc (Timor Bobonaro melange) and Sunda arc (Nias, Oyo melange, with common ophiolitic blocks). Evidence from Australian continental shelf S of Sumba shows large quantities of diapiric melange generated in accretionary complex. Comparable diapirs in Timor accreted at earlier stage. Evidence from Timor and Nias shows diapiric melange can be generated well after initial accretion process was completed)

Barber, A.J. & S. Wiryosujono (eds.) (1981)- The geology and tectonics of Eastern Indonesia. Proc. CCOP-IOC Working Group Meeting, Bandung 1979, Geological Research Development Centre (GRDC), Bandung, Special Publ. 2, p. 1-415.
(Conference volume with many benchmark papers on tectonics of Eastern Indonesia)

Barley, M.E., P. Rak & D. Wyman (2002)- Tectonic controls on magmatic-hydrothermal gold mineralization in the magmatic arcs of SE Asia. In: D.J. Blundell, F. Neubauer & A. von Quadt (eds.) The timing and location of major ore deposits in an evolving orogen, Geological Society, London, Special Publ. 204, p. 39-47.
(Most gold deposits in SE Asian arcs formed during tectonic reorganization intervals rather than steady-state subduction: (1) 25 Ma collision of Australian craton with Philippine Sea plate arc; (2) M Miocene/ 17 Ma mineralization following maximum extrusion of Indochina and cessation of S China Sea spreading; (3) majority and largest deposits formed since 5 Ma during plate reorganization with change in relative motion between Indian-Australian and Pacific plates between 5- 3.5 Ma following Philippine arc- Eurasia collision in Taiwan)

Baumann, P. (1982)- Depositional cycles on magmatic and back arcs: an example from Western Indonesia. Revue Institut Francais Petrole (IFP) 37, 1, p. 3-17.
(Five main depositional cycles in Eocene- Recent of Java, Sumatra: (1) M Eocene- E Oligocene (P11-P17), followed by uplift, block faulting, volcanism; (2) Latest Oligocene- E Miocene (P22/N3- N7?, ending with volcanism- uplift?; (3) late E Miocene- M Miocene (N8- N10-11; poorly known); (4) M- Late Miocene (N11/12-N14/17), followed by uplift, faulting; (5) Pliocene-Recent, starting with major transgression at Miocene-Pliocene boundary, N18. Major Late Pliocene- Recent volcanic phase)

Bayon, G., M. Patriat, Y. Godderis, A. Trinquier, P. De Deckker, D.K Kulhanek, A. Holbourn et al. (2023)- Accelerated mafic weathering in Southeast Asia linked to late Neogene cooling. Science Advances 9, 13, eadf3141, p. 1-9.

(online at: https://www.science.org/doi/pdf/10.1126/sciadv.adf3141)
(Neogene arc-continent collision in SE Asia may have driven global cooling through chemical weathering of freshly exposed ophiolites, resulting in atmospheric CO_2 removal. An 8-million-year record of seawater chemistry and sediment provenance in IODP Site U1482 core in E Indian Ocean, near outflow of Indonesian Throughflow, show erosion and weathering of ophiolitic rocks markedly increased after 4 Ma, E Pliocene, coincident with widespread island emergence in Sulawesi, Timor, Seram, Halmahera, New Guinea, etc.)

Beck, R.H. & P. Lehner (1974)- Oceans, new frontier in exploration. American Assoc. Petroleum Geol. (AAPG) Bull. 58, 3, p. 376-395.
(Vintage regional seismic profiles and interpretation NW Australia- Sunda Arc. Seismic examples of imbricated sediments North of Java and Timor Trough trenches)

Becker, M., E. Reinhart, S. Bin Nordin, D. Angermann, G. Michel & C. Reigber (2000)- Improving the velocity field in South and South-East Asia: the third round of GEODYSSEA. Earth Planets and Space 52, p. 721-726.
(online at: https://earth-planets-space.springeropen.com/counter/pdf/10.1186/BF03352271.pdf)
(Review of GEODYnamics of S and SE Asia (GEODYSSEA) project, a network of 42 GPS stations across SE Asia, observed between 1994-1998)

Beckley, L., L.A. Lawver & T.Y. Lee (1993)- Cenozoic basin formation in Southeast Asia. University of Texas, Austin, PLATES Project, Progress Report 62, p. 1-16. *(Unpublished)*

Beers, H.W. (ed.) (1970)- Indonesia, Resources and their technological development. University Press of Kentucky, p. 1-282.

Beltz, E.W. (1944)- Principal sedimentary basins in the East Indies. American Assoc. Petroleum Geol. (AAPG) Bull. 28, 10, p. 1440-1454.
(Vintage Indonesian basins map and basin summaries by Stanvac (Standard Oil NJ) geologist)

Benioff, H. (1954)- Orogenesis and deep crustal structure; additional evidence from seismology. Geological Society of America (GSA) Bull. 65, p. 385-400.
(Sunda Arc example of large 'marginal fault', deduced from dipping earthquake zones below volcanic arc, landward dipping at ~35° at intermediate depths of 70-300km, steepening with depth to 61° between 300-700km. Philippine Islands example of similar 'oceanic fault' (now called 'Wadati-Benioff zones'))

Benson, W.N. (1923)- Palaeozoic and Mesozoic seas in Australasia. Transactions Proc. Royal Society of New Zealand 54, p. 1-62.
(online at: https://paperspast.natlib.govt.nz/periodicals/TPRSNZ1923-54.2.10.1.1)
(Old, but still interesting discussion of Paleozoic- Mesozoic paleogeography of Australia- E Indonesia)

Benson, W.N. (1924)- The structural features of the margin of Australasia. Transactions Proc. Royal Society of New Zealand 55, p. 99-137.
(online at: https://paperspast.natlib.govt.nz/periodicals/TPRSNZ1924-55.2.10.1.5)
(Old, but still interesting discussion of tectonics- structure of East Indonesia, NW Australia, New Guinea, New Caledonia, etc.)

Berlage, H.P. (1937)- A provisional catalogue of deep-focus earthquakes in the Netherlands East Indies, 1918-1936. Gerlands Beitrage Geophysik 50, p. 7-17.
(First text to observe that deep earthquakes in Indonesia are concentrated along a plane dipping towards the Asian mainland (now known as Benioff zone (1949, 1954) or Wadati-Benioff zone; should have been named 'Wadati-Berlage zone'?;JTvG))

Berlage, H.P. (1939)- One hundred deep-focus earthquakes in the Netherlands Indies. Proc. 6th Pacific Science Congress, San Francisco, California, 1939, p. 135-138.

Bijlaard, P.P. (1935)- Beschouwingen over de knikzekerheid en de plastische vervormingen van de aardkorst in verband met de geologie van den Oost-Indischen archipel. De Ingenieur in Nederlandsch-Indie (I) 2, 11, p. I.135-I.156.
(online at: https://www.stichtingblauwelijn.nl/assets/files/1935-11.pdf)
('Discussion of buckling potential and plastic deformation of the Earth's crust as related to the East Indies Archipelago'. On the physics of plastic deformation of Earth's crust in the Indonesian region. Expansion of Vening Meinesz' theory of crustal downbuckling)

Bijlaard, P.P. (1936)- De verklaring voor het optreden van zwaartekracht anomalieen, diepzeetroggen, geosynclinalen, gebergtevorming en vulkanisme bij plaatselijke plastische vervorming van de aardkorst. De Ingenieur in Nederlandsch-Indie (I) 3, 7, p. I.93- I.97.
(online at: https://www.stichtingblauwelijn.nl/assets/files/1936-07.pdf)
('The explanation for gravity anomalies, deep sea troughs, geosynclines, mountain building and volcanism near local plastic deformation of the earth's crust'. Reply to Van Bemmelen (1936) critical remarks on Bijlaard (1935) theory)

Bijlaard, P.P. (1936)- Nadere toelichting van mijn theorie der plaatselijke plastische vervormingen op de tektoniek. De Ingenieur in Nederlandsch-Indie (I) 3, 11, p. 160-170.
(Second part of discussion between Van Bemmelen and Bijlaard on tectonic theory for Indonesian region)

Blom, J. (1934)- Geologische Probleme im Malayischen Archipel. Inaugural-Dissertation Friedrich Schiller University, Jena, p. 1-71.
('Geological problems in the Malayan Archipelago'. Overview of pre-1934 tectonic theories on the Indonesian Archipelago, without new synthesis or opinion)

Blundell, D.J. (2002)- The timing and location of major ore deposits in an evolving orogen; the geodynamic context. In: D.J. Blundell, F. Neubauer & A. von Quadt (eds.) The timing and location of major ore deposits in an evolving orogen, Geological Society, London, Special Publ. 204, p. 39-47.
(Review of tectonic settings of mineral deposits, with example of SE Asia- W Pacific arc system. In Indonesia all known mineral deposits lie within magmatic arcs and formed during or shortly after magmatic activity, but only 6 out of 15 Cenozoic magmatic arcs are known to contain significant mineralization)

Bock, Y., L. Prawirodirdjo, J.F. Genrich, C.W. Stevens, R. McCaffrey, C. Subarya, S.S.O. Puntodewo & E. Calais (2003)- Crustal motion in Indonesia from Global Positioning System measurements. J. of Geophysical Research 108, B8, 2367, p. 1-22.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2001JB000324)
(GPS surveys suggest tectonics dominated by interaction of 4 blocks: Sunda Shelf (moves 6 mm/yr SE rel. to Eurasia), S Banda Arc (CW rotation rel. to Sunda and Australia), Birds Head (rapidly moves WSW, subducting beneath Seram Trough) and E Sulawesi (CW rotation, transfering E-W Pacific motion into N-S shortening across N Sulawesi trench. Crustal blocks all experience significant internal deformation)

Boehm, G. (1901)- Aus den Molukken. Zeitschrift Deutschen Geologischen Gesellschaft 53, Briefliche Mitteilungen, p. 4-10.
(online at: https://www.biodiversitylibrary.org/item/150066#page/686/mode/1up)
('From the Moluccas'. First brief report by Boehm from his geological travels in E Indonesia in 1900-1901, and first report on Mesozoic fossils in 200 years since 'stone fingers' (belemnites) described by Rumphius in 1705. Mainly on visit to S coast of Sula Islands, with M Jurassic dark grey clayey limestones rich in ammonites (Sphaeroceras), belemnites and Inoceramus; also lower Cretaceous with Hoplites. No figures)

Boehm, G. (1902)- Weiteres aus den Molukken. Zeitschrift Deutschen Geologischen Gesellschaft 54, Briefliche Mitteilungen, p. 74-78.
(online at: https://www.biodiversitylibrary.org/item/150077#page/796/mode/1up)

('More from the Moluccas'. Continuation of paper above, on visits to Ambon, Buru, Misool. On Ambon Mesozoic sandstone-limestone, etc. Jurassic of Sula and Misool islands with fauna of European character and rel. undeformed. No figures)

Boehm, G. (1904)- Geologische Ergebnisse einer Reise in den Molukken. Proc. Comptes Rendus 9th International Geological Congress, Vienna 1903, p. 657-662.
('Geological results of a trip in the Moluccas'. Brief, early report on widespread Triassic and Jurassic marine sediments on islands of E Indonesia, noticing similarities of rocks and faunas with those from European Alps)

Boehm, G. (ed.) (1904-1959)- Beitrage zur Geologie von Niederlandisch-Indien. Palaeontographica, Supplement Vol. IV, 5 vols.
(online at: http://sammlungen.ub.uni-frankfurt.de/botanik/periodical/structure/4499189)
('Contributions to the geology of the Netherlands Indies'. Series of mainly paleontological papers from E Indonesia. Listed individually below)

Boehm, G. (1906)- Geologische Mitteilungen aus dem Indo-Australischen Archipel I. Neues aus dem Indo-Australischen Archipel, Neues Jahrbuch Mineralogie Geologie Palaontologie, Beilage Band 22, p. 385-412.
('News from the Indo-Australian Archipelago, etc.' Early overview of Mesozoic macrofossil localites in E Indonesia: Sula islands (Jurassic belemnites, Macrocephites, etc.), W Cenderawasih Bay (Wendesi M Jurassic ammonite Phylloceras), New Guinea N Coast (Walckenaer Bay ammonites and Inoceramus), Buru (Jurassic Perisphinctes, Late Triassic Tissotia), Ceram, etc. Remarkable similarities of Moluccas Mesozoic faunas and Spiti Fauna of Himalayas)

Bostrom, R.C. (1984)- Westward Pacific drift and the tectonics of eastern Asia. Tectonophysics 102, p. 359-376.
(Brief overview of tectonic history, involving W-ward displacement of Sundaland, and shared Paleozoic-Mesozoic petroleum systems between N Australia, New Guinea, Timor and other parts of eastern Indonesia)

Bothe, A.C.D. (1932)- Over de phasen van gebergtevorming in het Neogeen van den Indischen Archipel. De Mijningenieur 13, p. 71-77 and 88-92.
('On the phases of mountain formation in the Indies Archipelago'. Two or three phases of orogenesis observed in Tertiary of many places across Indies Archipelago)

Bradshaw, M. (2001)- Australia and Eastern Indonesia at the cross-roads of Gondwana and Tethys- the implications for petroleum resources. SEAPEX Exploration Conference 2001, Singapore, p. 1-8.

Branson, C.C. (1941)- Age of abyssal deposits of East Indian Archipelago. American Assoc. Petroleum Geol. (AAPG) Bull. 41, 2, p. 320-322.
(Brief review of very deep marine deposits in East Indies, including Danau Fm of Borneo (Molengraaff, 1910, 'probably Jurassic', but could be E Cretaceous: JTvG) and Permian, Triassic and Lower Cretaceous abyssal deposits of Timor)

Brest van Kempen, C.P. (1945)- Earthquakes in the Netherlands Indies In: P. Honig & F. Verdoorn (eds.) Science and scientists in the Netherlands Indies. Board for the Netherlands Indies, Surinam and Curacao, New York, p. 35-35.
(online at: https://archive.org/details/in.ernet.dli.2015.183759)
(Brief summary paper with Seismic map of the Netherlands Indies (a seismic risk map; not really geological))

Brouwer, H.A. (1915)- Over de tektoniek der Oostelijke Molukken. Proc. Koninklijke Nederlandse Akademie van Wetenschappen, Amsterdam 24, p. 987-994.
('On the tectonics of the Eastern Moluccas'. Early, brief overview of tectonics of the E Moluccas. See also Brouwer (1917) for English version or Brouwer (1918) for German version)

Brouwer, H.A. (1916)- Reisbericht omtrent geologische verkenningstochten op verschillende eilanden der Molukken, III. Tijdschrift Koninklijk Nederlands Aardrijkskundig Genootschap 33, p. 83-89.
(online at: https://www.delpher.nl/nl/tijdschriften/view?identifier=MMUBA13:001662001:00103)
('Travel notes of geological reconnaissance trips to various islands of the Moluccas'. Brief report on Brouwer's extensive reconnaissance trips to E Indonesian islands in 1915 (Sangi islands, Halmahera, Ternate, Bacan, Obi, Waigeo, Salawati, etc.)

Brouwer, H.A. (1916)- Geologische verkenningen in de Oostelijke Molukken. Verhandelingen Geologisch-Mijnbouwkundig Genootschap Nederland Kolonien, Geologische Serie 3 (Molengraaff volume), p. 31-56.
(online at: https://ia903208.us.archive.org/7/items/verhandelingenva3191geol/verhandelingenva3191geol.pdf)
('Geological reconnaissance in the East Moluccas'. Brief overview of reconnaissance trips in E Indonesia islands in 1915 (Ceram, Ambon, NE Buru, Sula islands, Obi, Batjan, Halmahera, Tanimbar, Kai Besar, etc.). Microfaunas of 1915 expedition still being studied by L. Rutten. Timor expedition of Molengraaff/ De Maresz Oyens/Brouwer around 1912 interpreted Timor as a series of large thrust faults, directed from NNE towards the Australian continent)

Brouwer, H.A. (1917)- On the tectonics of the eastern Moluccas. Proc. Koninklijke Nederlandse Akademie van Wetenschappen, Amsterdam 19, 1, p. 242-248.
(online at: https://dwc.knaw.nl/DL/publications/PU00012350.pdf)
(Early review of E Indonesia tectonics. Among recent significant discoveries is presence of large overthrusts on Timor and adjacent islands, probably continuing along entire outer belt of Banda islands to Babar, Yamdena, Seram and Buru. The Sula Islands, Obi and Misool do not show overthrust structures. No figures)

Brouwer, H.A. (1918)- Phasen der bergvorming in de Molukken. Inaugural speech, accepting the position of Professor at the Technische Hogeschool Delft (Delft Technical University), Waltman, p. 1-32.
(online at: https://uvaerfgoed.nl/viewer/fullscreen/11245_3_37806/1/)
('Phases of mountain building in the Moluccas'. Early overview of tectonics of the Molusccas, eastern Indonesia. Oldest dedimentation in orogenic belts aroun Banda Sea is of Permian age (But only on and around Timor). Late Triassic more widespread; on Timor developed in several vastly different facies, some reminescent of comparable facies in the Southern Alps. Widespread Late Jurassic- Cretaceous deep sea facies. 'Geosynclinal' sediments of Timor-Ceram Arc intensely folded in Late Tertiary. Etc. No maps, figures)

Brouwer, H.A. (1918)- Uber Gebirgsbildung und Vulkanismus in den Molukken. Geologische Rundschau 8, 5-8, p. 197-209.
(online at: https://www.zobodat.at/pdf/Geologische-Rundschau_8_0197-0209.pdf)
('On mountain building and volcanism in the Moluccas'. Brief discussion of geology of East Indonesia. Many of the metamorphic rocks in Eastern Indonesia are not Archaic or E Paleozoic age, but are metamorphosed Permian-Mesozoic sediments and basic extrusive rocks. Timor- Ceram arc characterized by thrust tectonics, directed towards Australian continent. First author to note the apparent relationship between extinction of volcanoes in Alor-Wetar sector of the Banda Arc adjacent to mountain-forming processes on Timor. Etc.)

Brouwer, H.A. (1918)- Kort overzicht onzer kennis omtrent geologische formaties en bergvormende bewegingen in den O.I. Archipel beoosten Java en Celebes. Verhandelingen Geologisch-Mijnbouwkundig Genootschap Nederland Kolonien, Geologische Serie 2, p. 293-332.
('Brief overview of our knowledge of the geological formations and mountain building movements in the east Indies archipelago East of Java and Sulawesi'. Early overview of distribution of Paleozoic- Mesozoic- Tertiary rocks across E Indonesia)

Brouwer, H.A. (1919)- On the age of the igneous rocks in the Moluccas. Proc. Koninklijke Nederlandse Akademie van Wetenschappen, Amsterdam, 21, p. 803-815.
(online at: https://dwc.knaw.nl/DL/publications/PU00012138.pdf)
(On a variety of different age volcanic-plutonic rocks in E Indonesia)

Brouwer, H.A. (1919)- Geologisch overzicht van het oostelijk gedeelte van den Oost-lndischen Archipel. Jaarboek Mijnwezen Nederlandsch Oost-Indie 46 (1917), Verhandelingen II, p. 145-452.
(Rel. comprehensive overview of 1917 state of knowledge of East Indonesia geology)

Brouwer, H.A. (1920)- Nieuwere opvattingen omtrent de geologie van den O.I. Archipel. In: Algemeen Ingenieurs Congres, Batavia, May 1920, Sectie 5, Mijnbouw en Geologie, Mededeeling 12, p. 3-16.
(online at: https://www.delpher.nl/nl/boeken/view?identifier=MMKB31:045934000:00003)
('Newer views on the geology of the East Indies Archipelago'. Brief review of recent developments of tectonics of Indonesia, with emphasis on widespread evidence for thrust tectonics. No figures)

Brouwer, H.A. (1920)- On the crustal movements in the region of the curving rows of islands in the eastern part of the East-Indian Archipelago. Proc. Koninklijke Nederlandse Akademie van Wetenschappen, Amsterdam, 22, 7-8, p. 772-782.
(online at: https://dwc.knaw.nl/DL/publications/PU00012027.pdf)
(Curving rows of islands of Moluccas similar to many chains of Alpine structure. Rows of islands of Moluccas may be grouped into (1) zone characterized by outward-directed overthrusts (Timor-Ceram row); (2) marginal zone without overthrust tectonics (Sula-islands, Misool, W New Guinea S of Mac Cluer Bay (= Bintuni) and probably also Kei-islands; (3) inner zone with young active volcanoes)

Brouwer, H.A. (1920)- Die horizontale Bewegung der Inselreihen in den Molukken. Nachrichten Kon. Gesellschaft Wissenschaften Gottingen, Mathematisch-Physikalische Klasse, p. 172-173.
(online at: https://www.digizeitschriften.de/dms/img/?PID=GDZPPN002505738)
('The horizontal movement of the island rows in the Moluccas'. Brief response to H. Stille critique of Brouwer (1917) paper on mountain building and volcanism in the Moluccas. Stille questioned presence of important horizontal movements on Timor, etc., but Brouwer insists they are important)

Brouwer, H.A. (1921)- Some relations of earthquakes to geologic structure in the East Indian archipelago. Bull. Seismological Society of America 11, 3-4, p. 166-182.
(online at: https://books.google.com/books?id=SkXPAAAAMAAJ&pg=PA166&lpg=PA166&dq=Brou Etc.)
(Earthquake zones of globe may be traces along mountain rnges of Tertiary age. In East Indian Archipelago earthquakes do not occur where mountains were growing in Tertiary time, but where they are still growing now. No clear relationships between earthquakes and volcanism. Most epicenters lie under water. Rows of islands in E Indian Archipelago not only move in vertical direction, also largely in horizontal direction)

Brouwer, H.A. (1921)- The horizontal movement of geanticlines and the fractures near their surface. Journal of Geology 29, 6, p. 560-577.
(online at: https://www.journals.uchicago.edu/doi/pdf/10.1086/622810)
(Early attempt to explain deep basins and uplifted islands of E Indonesia (uplifted coral reefs to 1300m in Timor, Dai 620m, Roti 470m, etc.))

Brouwer, H.A. (1922)- The major tectonic features of the Dutch East Indies. J. Washington Academy Sciences 12, 7, p. 172-185.
(Brief discussion; summary of 1922 lecture)

Brouwer, H.A. (1925)- The geology of the Netherlands East Indies. Lectures delivered as exchange-professor at the University of Michigan in 1921-1922. MacMillan Co., New York, p. 1-160.
(First 'text-book' on the geology of Indonesia, based on series of lectures at University of Michigan, U.S.A.)

Brouwer, H.A. (1926)- Structure of the East Indies. Proc. 2nd Pan-Pacific Science Congress, Australia 1923, 1, p. 784-786.
(Brief review, with one regional map)

Brouwer, H.A. (1926)- Volcanic action and mountain building in the Dutch East Indies. Proc. 2nd Pan-Pacific Science Congress, Australia 1923, 1, p. 856-859.

(Brief summaries. No maps or figures)

Brouwer, H.A. (1926)- The Carboniferous and Permian of the Netherlands East Indies. Proc. 2nd Pan-Pacific Science Congress, Melbourne, Australia 1923, 2, p. 1024-1027.

Brouwer, H.A. (1927)- Vulkanisme en aardbevingen in de Oost-Aziatische eilandenreeksen. Natuurkundige Voordrachten, Nieuwe Reeks 5, Maatschappij Diligentia, Van Stockum, The Hague, p. 88-98. *(online at: https://natuurwetenschappen-diligentia.nl//wp-content/uploads/2020/02/Diligentia_jaarboek_5.pdf#page=91)*
('Volcanism and earthquakes in the East Asian islan arcs'. Lecture notes)

Brouwer, H.A. (1928)- Mesozoic formations in the Netherlands East Indies. Proc. 3rd Pan Pacific Science Congress, Tokyo 1926, National Research Council of Japan, 2, 27, p. 1704. *(Abstract only)*.
(online at: https://books.google.com/books?id=Y4wKAAAAIAAJ&pg)
(Very brief review of occurrences of Triassic, Jurassic and Cretaceous sediments in Indonesian Archipelago. Triassic widespread, especially Late Triassic, and in widely different facies. In East, Jurassic mainly on Timor, Roti, Ceram and Buru. M and U Jurassic shales with concretions of Sula Islands constrast strongly with Jurassic of Misool, Timor and Ceram. In W, abyssal facies of Danau Fm on Borneo very different from metamorphic-neritic Jurassic facies on Sumatra. U Cretaceous sediments extensively developed

Brouwer, H.A. (1929)- Geology of the Netherlands East Indies. In: L.M.R. Rutten (ed.) Science in the Netherlands Indies, Koninklijke Nederlandse Akademie van Wetenschappen, Amsterdam, p. 101-125.
(online at: https://resolver.kb.nl/resolve?urn=MMKB18A:026088000:pdf)
(Brief overview of the geology of the Indonesian region. No figures)

Brouwer, H.A. (1931)- De stratigraphie van Nederlandsch Oost-Indie, 18. Paleozoic. In: B.G. Escher et al. (eds.) De palaeontologie en stratigraphie van Nederlandsch Oost-Indie, Leidsche Geologische Mededelingen 5 (K. Martin memorial volume), Chapter III, p. 552-566.
(online at: https://repository.naturalis.nl/pub/505691/LGM1931005001020.pdf))
(Overview of occurrences of Paleozoic in Indonesia. Pre-Carboniferous rocks known only from New Guinea. Carboniferous- Permian rocks in N Sumatra, C and S Sumatra, Timor, Savu, Roti, Luang, Babar, New Guinea)

Brouwer, H.A. (1941)- De bouw van den zuidoostelijken Indischen archipel. Programma 22e Koloniale Vakantiecursus voor Geografen, p. 1-6.
('The structure of the southeastern Indies Archipelago'. Brief review. No figures/ maps)

Brouwer, H.A. (1949)- Evolution orogenique ou consolidation prochaine aux Indes orientales. In: Livre jubilaire Charles Jacob, Annales Hebert et Haug, Universite de Paris, 7, p. 31-42.
('Orogenic evolution or next consolidation in the East Indies'. Early review of orogenic history of Indonesia, with special reference to Sulawesi (junction of two arcs) and Timor (with large nappe tectonics))

Brown, J.L. & J.E. McCallum (1997)- An atlas of sealing faults in SE Asia. In: J.V.C. Howes & R.A. Noble (eds.) Proc. Int. Conf. Petroleum systems SE Asia & Australia, Jakarta 1997, Indonesian Petroleum Association (IPA), p. 837-841.

Brunn, J.H. & P.B. Burollet (1979)- Island arcs and folded ranges. In: W.J.M. van der Linden (ed.) Fixism, mobilism or relativism: Van Bemmelen's search for harmony, Geologie en Mijnbouw 58, 2, p. 117-126.
(online at: https://drive.google.com/file/d/0B7j8bPm9Cse0RGQxdG1sTnNoalE/view)
(Includes chapter on Seram arc and Banda Sea. Sumba (erroneously) viewed as promontory of NW Australian margin. With Hamilton (1979) one of first to suggest Banda sea formed by longitudinal extension))

Bucking, H. (1904)- Zur Geologie des nordostlichen Indischen Archipels. Sammlungen Geologischen Reichs-Museums Leiden, serie 1, 7, p. 231-253.
(online at: www.repository.naturalis.nl/document/552406)

('On the geology of the NE Indies archipelago'. Brief descriptions of islands Bacan, Mandioli, Kasiruta, Obi Besar, Manipa and Sulabesi. No figures)

Budiman, I., J. Nasution, I. Sobari & W.H. Simamora (2000)- Gravity anomaly map of western part of Indonesia, scale 1:2,000,000. Geological Research Development Centre (GRDC), Bandung.

Burollet, P.F. & C. Salle (1986)- Problemes tectoniques en Indonesie. In: P. Le Fort et al. (eds.) Evolution des domaines orogeniques d'Asie meridionale (de la Turquie a l'Indonesie) (Pierre Bordet Memorial Volume), Mem. Sciences de la Terre 47, Nancy 1986, p. 113-127.
('Tectonic problems in Indonesia'. Brief review of tectonics of Indonesia, with more detail on Sumba and Tanimbar- Kai islands. Sumba terrane, with Cretaceous flysch paleocurrents directed mainly from N to S and Meratus-like unconformity around Cretaceous-Paleocene boundary, was part of Sundaland margin)

Cao, L., X. He, L. Zhao, C.C. Lu, T. Hao, M. Zhao & X. Qiu (2021)- Mantle flow patterns beneath the junction of multiple subduction systems between the Pacific and Tethys domains, SE Asia: constraints From SKS-wave splitting measurements. Geochem. Geophysics Geosystems 22, e2021GC009700, p. 1-17.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2021GC009700)
(SKS-wave splitting data from seven seismic stations located around Celebes Sea suggest various types of mantle flow in area: (a) corner flow in mantle wedge above W-ward-subducting Molucca Sea (Sangihe) slab, (b) two-layer anisotropy related to E-ward subducting Molucca Sea (Halmahera) slab, (c) deflected flow due to proximity to Sangihe slab's edges, (d) trench-normal mantle flow beneath SE Borneo due to subduction of Indian-Australian plate, and (e) NW Borneo-Palawan trough-parallel mantle flow beneath NE Borneo)

Cardwell, R.K. (1980)- Geometry of the lithosphere subducted beneath the Eastern Indonesian and Philippine islands as determined from the spatial distribution of earthquakes and focal mechanism solutions. Ph.D. Thesis Cornell University, Ithaca, p. 1-143.
(Mainly two published papers by Cardwell and Isacks (1978) and Cardwell et al. (1980), below)

Cardwell, R.K. & B.L. Isacks (1978)- Geometry of the subducted lithosphere beneath the Banda Sea in Eastern Indonesia from seismicity and fault plane solutions. J. of Geophysical Research 83, B6, p. 2825-2838.
(Earthquake data fault plane solutions suggest two lithospheric plates descending into upper mantle beneath Banda Sea: (1) along Banda arc, laterally continuous slab that subducted at plate boundary defined by Java trench-Timor Trough-Aru Trough system; (2) descends to SW to ~100 km depth in Seram Trough region and may be joined to Banda subduction system by W extension of New Guinea Tarera- Aiduna fault zone. Banda arc slab contorted at E end of arc where trench and line of active volcanoes curve NE. Contortion appears to be lateral bend in subducted slab that is continuous from surface to depths of 600 km)

Cardwell, R.K. & B.L. Isacks (1981)- A review of the configuration of the lithosphere subducted beneath the eastern Indonesian and Philippine Islands. In: A.J. Barber & S. Wiryosujono (eds.) The geology and tectonics of Eastern Indonesia, Proc. CCOP-IOC SEATAR Working Group Meeting, Bandung 1979, Geological Research Development Centre (GRDC), Bandung, Special Publ. 2, p. 29-47.
(Identification of subducting slabs from earthquake data. Seismic zone from Timor Trough to >600km depth below S Banda Basin, but does not appear to be linked to Seram Trough)

Cardwell, R.K., B.L. Isacks & D.E. Karig (1980)- The spatial distribution of earthquakes, focal mechanism solutions and subduced lithosphere in the Philippine and North-eastern Indonesian islands. In: D.E. Hayes (ed.) The tectonic and geologic evolution of Southeast Asian seas and islands, American Geophysical Union (AGU), Geophysical Monograph 23, p. 1-35.
(Earthquake focal mechanisms show configuration of lithosphere subducted beneath Philippine and NE Indonesian islands and geometry and nature of plate boundaries in region. Philippine region aggregate of island arcs between Philippine Sea Plate and SE Asian Plate, with main deformation along Philippine Fault and opposing subduction zones (Manila Trench, Negros Trench, Cotabato Trench). S-dipping zone of earthquake hypocenters indicates lithosphere of Celebes Basin subducted along W part of N Sulawesi Trench to

depth of >200 km beneath N arm of Sulawesi. Convergence between Philippine Islands and W boundary of Philippine Sea Plate along E Luzon Trough and Philippine Trench. S Philippine Trench is young feature)

Carey, S.W. (1975)- Tectonic evolution of Southeast Asia. Proc. 4th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, p. 17-48.
(Tectonic model for SE Asia using the 'Expanding earth' theory (Carey believed in continental drift, but not in subduction))

Carey, S.W. (1975)- The subduction myth. Proc. SE Asia Petroleum Exploration Society (SEAPEX) 2, Singapore, p. 41-69.
(Entertaining discussion by leader of expanding earth movement. Plate tectonic and Expansion 'tectonic schools' agree on seafloor spreading, but not subduction)

Carey, S.W. (1986)- Geotectonic setting of Australasia. In: R.C. Glenie (ed.) Second South-Eastern Australia oil exploration symposium, Melbourne 1985, Petroleum Exploration Society Australia (PESA), p. 3-25.
(Controversial/ unconventional tectonic model. 'most prospectors accept plate tectonics, although subduction is patently false, and Earth is expanding at accelerating rate')

Carlile, J.C. & A.H.G. Mitchell (1994)- Magmatic arcs and associated gold and copper mineralization in Indonesia. In: T.M. van Leeuwen et al. (eds.) Indonesian mineral deposits- discoveries of the past 25 years. J. Geochemical Exploration 50, p. 91-142.
(Gold mineralization in andesitic arcs, active for 3-20 My intervals from Cretaceous- Pliocene. Fifteen major arcs; known ore bodies in six mid-Tertiary- Pliocene arcs. Indonesia arcs total ~7,000 kms in length. Individual arcs or segments of arcs characterized by specific mineralization types reflecting arc basement related to earlier collisions and reversals in tectonic polarity and erosion level)

Caughey, C.A., D.C. Carter, J. Clure, M.J. Gresko, P. Lowry, R.K. Park & A. Wonders (eds.) (1996)- Proc. Int. Symposium on Sequence Stratigraphy in SE Asia, Jakarta 1995, Indonesian Petroleum Association (IPA), p. 1-487.

Cawood, P., G. Zhao, G. Zhao, J. Yao, W. Wang, Y. Xu & Y. Wang (2018)- Reconstructing South China in Phanerozoic and Precambrian supercontinents. Earth-Science Reviews 186, p. 173-194.
(History of S China Craton (= Yangtze + Cathaysia blocks). Isolated outcrops of Archean rocks in Yangtze Block preserve record of Meso- to Neo-Archean magmatism, sedimentation and metamorphism associated with global craton formation and stabilization (Kenor supercontinent). Paleoproterozoic tectonostratigraphic records suggest Yangtze Block linked to NW Laurentia, whereas Cathaysia was joined to N India. During formation of Rodinia at end of Mesoproterozoic through Pangea in M Paleozoic, Cathaysia remained joined to N India. During final assembly of Gondwana in E Paleozoic suturing of India- S China with W Australia-Mawson blocks resulted in accretion of Sanya Block of Hainan Island with rest of Cathaysia. Accretion of Laurussia to Gondwana in M-Paleozoic to form Pangea corresponds with initiation of lithospheric extension along N margin of Gondwana and separation of continental blocks, including S China, which then drifted N across Paleo-Tethys to collide with Asian segment of Pangea in Permo-Triassic)

CCOP-IOC (1981)- Studies in East Asian tectonics and resources (2nd SEATAR Workshop, Bandung, Indonesia, 1978). ESCAP, CCOP, Technical Paper 7a, 2nd ed., p. 1-250.
(Report on ongoing geological research along nine SEATAR mega-regional transects)

CCOP (1991)- Total sedimentary isopach maps, offshore East Asia. Committee for Co-Ordination of Joint Prospecting for Mineral Resources in Asian Offshore Areas, CCOP, Technical Bulletin 23, sheets 1-6, p. 1-116.
(Sediment isopach maps and summaries of SE and E Asia basins)

CCOP (2021)- Magnetic anomaly map of East and Southeast Asia, Revised version (3rd Ed.). CCOP/ Geological Survey of Japan, 1: 4 million scale.
(online at: http://www.ccop.or.th/publication-details/97)

Chamot-Rooke, N. & X. Le Pichon (1999)- GPS determined eastward Sundaland motion with respect to Eurasia confirmed by earthquakes slip vectors at Sunda and Philippine trenches. Earth Planetary Science Letters 173, p. 439-455.
(GPS over SE Asia revealed Indochina, Sunda shelf and part of Indonesia behave as rigid 'Sundaland' platelet, which rotates clockwise relative to Eurasia. Sundaland E-ward velocity of ~10 mm/yr on S boundary increasing to 16-18 mm/yr on N boundary)

Chamot-Rooke, N., X. Le Pichon, C. Rangin, P. Huchon, M. Pubellier, C. Vigny & A. Walpersdorf (1998)- Sundaland motion in a global reference frame detected from GEODYSSEA GPS measurements: implications for relative motions at the boundaries with the Australo-Indian plates and the South China block. In: P. Wilson & G.W. Michel (eds.) The Geodynamics of S and SE Asia (GEODYSSEA) Project, GeoForschungsZentrum, Potsdam, Scientific Technical Report STR 98/14, p. 39-74.
(GPS measurents over SE Asia in 1994-1998 show stations in Vietnam, Malaysia, Thailand, Borneo, E Sumatra have no resolvable relatice motions ('rigid Sundaland'). However, Sundalan block is rotating clockwise with respect to Eurasia, moving to ENE from 14mm/yr in E Java, to 25mm/yr in N Sumatra. Etc.)

Chapman, D.R. (1964)- On the unity and origin of the Australasian tektites. Geochimica Cosmochimica Acta 28, p. 841-888.
(Review of widespread Pleistocene tektites, distributed several 1000 km across SE Asia and Australia. Tektites remarkably similar in composition. Probably caused by major meteorite impact, probably on moon. Size and shape of tektites interpreted to reflect higher T portion of crater ejecta descended over SE Australia and lower T portions were strewn progressively over SW Australia-Indonesia and further North. 'Glass pebbles' locally known as billitonites, philippinites, australites, javanites, philippinites, etc.))

Charlton, T.R. (1986)- A plate tectonic model of the eastern Indonesia collision zone. Nature 319, p. 394-396.
(E Indonesia interpreted in terms of rel. simple three plate indentation model)

Charlton, T.R. (1991)- Postcollision extension in arc-continent collision zones, eastern Indonesia. Geology (GSA) 19, p. 28-31.
(Postcollisional extension common in E Indonesia orogenic belts, starting <5 My after compressional deformation (Timor area, Gulf of Bone in Sulawesi, Wandamen -Wondiwoi Terrane of W Papua). Extension results from decoupling of subducting oceanic lithosphere from unsubductable continental lithosphere. Superimposition of extension virtually unavoidable consequence of arc-continent collision)

Charlton, T.R. (2000)- Tertiary evolution of the Eastern Indonesia collision complex. J. Asian Earth Sciences 18, 5, p. 603-631. *(online at: http://directory.umm.ac.id/Data%20Elmu/jurnal/J-a/Journal%20of%20Asian%20Earth%20Science/Vol18.Issue5.2000/352.pdf)*
(Interpretations of last 35 My of tectonic evolution of E Indonesia, with plate reconstructions at 5 My intervals. Oldest reconstruction predates collisional deformation between N-moving Australian continent and E-W oriented, S- facing subduction zone extending from S margin of Eurasian continent E-wards. Beginning at ~30 Ma the Australian continental margin commenced collision with subduction zone along restored N margin, from Sulawesi in W to PNG in E. At ~24 Ma present-day pattern of oblique convergence between N margin of Australia and Philippine Sea Plate began. From ~18 Ma, S-directed subduction commenced at Maramuni Arc in N New Guinea. Sorong Fault Zone strike-slip system active from ~12 -6 Ma)

Charlton, T.R. (2001)- Permo-Triassic evolution of Gondwanan eastern Indonesia, and the final Mesozoic separation of SE Asia from Australia. J. Asian Earth Sciences 19, 5, p. 595-617.
(online at: https://www.academia.edu/27703744/Permo_Triassic_evolution_of_Gondwanan_eastern_Indonesia_and_the_final_Mesozoic_separation_of_SE_Asia_from_Australia)
(E Indonesia continental fragments with Australian/Gondwanan affinities remarkably uniform Permo-Triassic tectonostratigraphy, ranging from granitoid belt in N, through continental platform, to intracontinental rift system in S. In rift system complementary upper and lower plate rifted margins recognised in N and S Banda

Arcs. N granitoid belt initiated in mid-Carboniferous, intracontinental rift system began in latest Carboniferous- earliest Permian. Extension in N rift margin ceased in M Carnian, with decline in igneous activity in granitoid belt to North. Sibumasu Terrane originated on Gondwanaland margin, rifted away in E Permian. Gondwanan E Indonesia acted as continental connection between Sibumasu/Indochina and Australia in Permian- Triassic, permitting limited floral- faunal interchange between Gondwanaland and SE Asia until final separation in Late Triassic. M Carnian structural event in E Indonesia may be related to this separation)

Charlton, T.R. (2004)- The petroleum potential of inversion anticlines in the Banda Arc. American Assoc. Petroleum Geol. (AAPG) Bull. 88, 5, p. 565-585.
(Timor, Tanimbar and Seram perceived structural complexity may be overstated. Proposes inversions of Permian-Jurassic grabens as fundamental structural style on E Indonesia)

Charlton, T.R. (2012)- Permian-Jurassic palaeogeography of the SE Banda Arc region. Berita Sedimentologi 24, p. 5-17.
(online at: https://journal.iagi.or.id/index.php/FOSI/article/download/180/150)
(Paleogeographic maps of S and E Banda forearc (Savu to Kai islands, incl. Timor-Tanimbar) and adjacent parts of NW Australian continental margin for E Permian, M-L Permian, E-M Triassic, Late Triassic, and E, M and Late Jurassic. Three main rift phases (E Permian, Late Triassic and M-Late Jurassic) separated by quieter tectonic intervals with low facies diversity)

Charlton, T.R. (2013)- Sundaland Timor Paleogene rifting and regional palaeotectonics. Proc. 37th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, IPA13-G-005, p. 1-11.
(Alternative plate reconstruction of Paleogene of Indonesia- NW Australia, suggesting E Sundaland and Gondwanaland/ NW Australia remained attached until final separation by rifting in Paleogene. Main driver for model is similarity of Paleogene rifting in both Sundaland and on Timor island, which is here interpreted as part of Australian continental margin)

Charlton, T.R. (2016)- Neogene plate tectonic evolution of the Banda Arc. Proc. 40th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, IPA16-21-G, p. 1-16. *(online at: https://www.researchgate.net/publication/303588866_Neogene_plate_tectonic_evolution_of_the_Banda_Arc)*
(New East Indonesia plate reconstructions at 1 My intervals from 30 Ma- Present. Main differences between previous reconstructions are >30° CCW rotation of Bird's Head since ~6 Ma, and origin of backarc spreading in N and S Banda Basins by process of 'fixed slot' subduction geometry, not trench rollback. Four phases: (1) 30-18 Ma: collision, then indentation of 'Greater Sula Spur' promontory into E continuation of Sunda Arc subduction system; (2) 18-12 Ma: Terranes N of Sorong Fault Zone move WSW relative to Australia, with motion of Pacific plate. (3) 12-6 Ma: Development of proto-Banda Arc by fixed-slot backarc spreading in N Banda Basin; (4) 6-0 Ma: Collision around Banda Arc and rotation of Bird's Head)

Charlton, T.R. (2023)- Cretaceous-Paleogene rifting on the NW margin of the Australian continent, SE Banda Arc region. Berita Sedimentologi 49, 2, p. 1-27.
(online at: https://journal.iagi.or.id/index.php/FOSI/article/view/437/415)
(Banda Terrane successions of Timor and correlative units in Sumba widely considered allochthonous to Australian continental margin successions, but new interpretation proposed here suggests Banda Terrane, originated on the outermost (northern) edge of the Australian continent (N.B.:the 'widely considered allochthonous interpretation' of Banda Terrane as derived from Sundaland margin is still a more viable model?; JTvG))

Charlton, T.R. (2023)- Jurassic-Paleogene spreading history of the northern Indian Ocean as a constraint on the evolution of the north Australia continental margin. Berita Sedimentologi 49, 2, p. 75-107.
(online at: https://journal.iagi.or.id/index.php/FOSI/article/view/428)
(New reconstructions suggest Argolandand- Greater Sula Spur continental terranes formed continuous crustal connection between SE Asia and N Australia through late Mesozoic- E Paleogene, and that Indian Ocean developed entirely within disrupting Gondwanaland supercontinent, rather than linking E into Pacific Ocean)

Choi, D.R. (2005)- Deep earthquakes and deep-seated tectonic zones: a new interpretation of the Wadati-Benioff zone. In: F.C. Wezel (ed.) Earth dynamics beyond the plate paradigm, Boll. Societa Geologica Italiana, Special Volume 5, p. 79-118.
(Unorthodox, non-plate-tectonic model for SE Asia tectonics, etc.)

Clements, B., P.M. Burgess, R. Hall & M.A. Cottam (2011)- Subsidence and uplift by slab-related mantle dynamics: a driving mechanism for the Late Cretaceous and Cenozoic evolution of continental SE Asia? In: R. Hall et al. (eds.) The SE Asian gateway: history and tectonics of Australia-Asia collision, Geological Society, London, Special Publ. 355, p. 37-51.
(online at: https://www.academia.edu/download/40509377/Subsidence_and_uplift_by_slab-related_ma20151130-18118-rqvgto.pdf)
(Extensive Cretaceous-Paleocene regional unconformity from Indochina to Java (~5.6 million km^2) may be due to subduction- driven mantle processes. Cessation of subduction, descent of N- dipping slab into mantle, and consequent uplift and denudation of sediment-filled Late Jurassic- E Cretaceous dynamic topographic low help explain extent and timing of unconformity. Sediments started to accumulate above unconformity from M Eocene when subduction recommenced under Sundaland)

Clements, B. & R. Hall (2011)- A record of continental collision and regional sediment flux for the Cretaceous and Palaeogene core of SE Asia: implications for early Cenozoic palaeogeography. J. Geological Society, London, 168, p. 1187-1200.
(online at: http://searg.rhul.ac.uk/pubs/clements_hall_2011%20Sundaland%20emergence.pdf)
(Detrital zircons from Eo-Oligocene sandstones of SW West Java derived from local volcanic sources and Sundaland. Populations with ages of 50-80 Ma (from two discrete volcanic arcs in Java and Sulawesi), 74-145 Ma (E-M Cretaceous granites of Schwaner Mts of SW Borneo), 202-298 Ma (Permian-Triassic Tin Belt granites), 480-653 Ma and 723-1290 Ma (Proterozoic SE Asia basement once part of Gondwana). M Eocene sediment derived mainly from Tin Belt, Late Eocene and younger Borneo source more important. Microcontinental collision at Java margin (~80 Ma) halted Cretaceous subduction and resulted in elevation of large parts of continental SE Asia)

Clermonte, J. (1982)- Eastern Indonesia peripheral to northern Australia: post-Mesozoic structures and orogeny. Bull. Centres Recherches Exploration-Production Elf-Aquitaine 6, 2, p. 503-511.

Clure, J. (1998)- Complex Eastern Indonesia poses exploration challenges. Oil and Gas Journal 96, 38, p. 91-95.

Cobbing, E.J. & D.I.J. Mallick (1984)- South East Asia Granite Project: Preliminary Report - Indonesia. British Geological Survey (BGS) Overseas Division, Technical Report WC/OR/84/2, p. 1-45.
(online at: https://resources.bgs.ac.uk/PublicationPDFs/19800655.pdf)
(Review of granites of Riau Islands, Bangka-Belitung and W Sumatra, based on 1983 fieldwork, with comparisons to Malay Peninsula 'Main Range'(S-type) and 'Eastern Belt'; mainly I-type) granitoid types. W Sumatra granites mainly Cretaceous I-type subduction-related granites)

Cockroft, P. & K. Robinson (1988)- Chemistry of oilfield waters in South East Asia and their application to petroleum exploration. Proc. Offshore South East Asia Conference, Singapore 1988, SEAPEX Proceedings 8, p. 221-238.
(Study of formation waters from 400 SE Asia wells. Majority fresh or brackish meteoric to connate waters)

Cole, J.M. & S. Crittenden (1997)- Early Tertiary basin formation and the development of lacustrine and quasi-lacustrine/marine source rocks on the Sunda Shelf of SE Asia. In: A.J. Fraser, S.J. Matthews & R.W. Murphy (eds.) Petroleum Geology of Southeast Asia, Geological Society, London, Special Publ. 126, p. 147-183.
(Tertiary basins of Sunda Shelf of SE Asia formed in ?Mid- Late Eocene and accumulated thick syn-rift lacustrine and low salinity organic-rich shales through Late Paleogene. Towards end Oligocene- E Miocene marine transgression throughout region. Syn-rift sediments most important hydrocarbon source rocks)

Collette, B.J. (1954)- On the gravity field of the Sunda region (West Indonesia). Geologie en Mijnbouw 16, 7, p. 271-300.
(online at: https://drive.google.com/file/d/0B7j8bPm9Cse0Yi13a19UM20tQ0k/view)
(Part of University of Utrecht Ph.D. Thesis. Interpretation of five gravity profiles through Sumatra and Java, based on broadly spaced gravity data from Vening Meinesz and BPM (see also Van Bemmelen 1954))

Collette, B.J. (1954)- On the gravity field of the Sunda region (West Indonesia) - a postscript. Geologie en Mijnbouw 16, p. 335-339.
(online at: https://drive.google.com/file/d/0B7j8bPm9Cse0QzA4cUJzVmlrNGM/view)
(Response to Van Bemmelen (1954) critique of Collette (1954) thesis work)

Corbett, G.J. & T.M. Leach (1998)- Southwest Pacific Rim gold-copper systems: structure, alteration and mineralization. Soc. Economic Geologists (SEG), Special Publ. 6, p. 1-238.
(draft online at: https://corbettgeology.com/wp-content/uploads/2016/07/short-course-manual-1997.pdf)
(On Indonesia- New Guinea- Philippines gold deposits. Includes discussions of Masupa Ria, Kalimantan, Wetar, etc.)

CoreLab/ PERTAMINA (1995)- The petroleum geology and economic assessment of the foreland basin areas of Eastern Indonesia. 5 vols. *(Unpublished)*

Courteney, S. (1995)- Sequence stratigraphy applied to the hydrocarbon productive basins of western Indonesia. In: G.H. Teh (ed.) Southeast Asian basins: oil and gas for the 21st century, Proc. AAPG-GSM Int. Conference 1994, Bull. Geological Society Malaysia 37, p. 363-394.
(online at: https://gsmpubl.files.wordpress.com/2014/09/bgsm1995a27.pdf)
(>3000 exploratory wells drilled since 1870 in W Indonesia with 750 discoveries. By 1992 over 300 producing fields in 11 basins and 100 fields shut-in or abandoned. Published work is of regional nature. Lithostratigraphy mainly based on pre-1960's work, with terminology varying between companies. Biostratigraphy handicapped by lack of age diagnostic fossils in E Miocene and older sediments in most of Sumatra and Natuna. Java-Kalimantan older section more marine with age diagnostic fossils, but errors in age determination due to reworking. Propose correlative framework using sequence stratigraphy)

Courteney, S. (1996)- Western Indonesia-1: Sequence stratigraphy buoys W. Indonesia basins. Oil and Gas Journal 94, May 20, p. 86-90.

Courteney, S. (1996)- Western Indonesia-2: Middle Eocene, older sequences in rifts key to potential in Western Indonesia. Oil and Gas Journal 94, 22, May 27, p. 71-74.
(Hydrocarbons in Sumatra, Natuna, Sunda Basin, Lombok, Barito, NW Java, possibly also E Java basins all tied to M Eocene source rocks, mainly lacustrine, limited to Paleogene rifts)

Curray, J.R. (1989)- The Sunda Arc: a model for oblique plate convergence. In: J.E. van Hinte et al. (eds.) Proc. Snellius II Symposium, Jakarta 1987, Netherlands J. of Sea Research 24, p. 131-140.
(Sunda Arc extends from Himalayas to Banda Arc. Variations along arc function of direction and speed of convergence across subduction zone and sediment thickness on underthrusting plate. Highly oblique convergence may lead to lateral terrane transport and opening - closing of marginal basins like Andaman Sea)

Daly, M.C., M.A. Cooper, I. Wilson, D.G. Smith & B.G.D. Hooper (1991)- Cenozoic plate tectonics and basin evolution in Indonesia. Marine and Petroleum Geology 8, 1, p. 2-21. *(online at: https://www.academia.edu/82695666/Papers_Cenozoic_plate_tectonics_and_basin_evolution_in_Indonesia)*
(BP plate reconstruction. evolution. India collision and indentation led to major clockwise rotation of SE Asia. Sumatran basins opened due to back arc extension in Eocene. Closure of marginal ocean basin resulted in major contractional event in Late Oligocene. Gulf of Thailand basins and Andaman Sea opened in response to rotation of Indochina and oblique convergence at Sunda trench. Inversion S end of these basins and uplift in Borneo coincided with collision of Reed Bank Terrane with Borneo. Opening of Makassar Straits, Kutei, Tarakan and Barito basins in Eocene. Inversion of these basins result of collision of Australia and Australia-

derived microplates in Late Miocene/Pliocene. Pliocene foldbelt and foreland basin formation in New Guinea result of oblique arc collision. Basin evolution of SE Asia not result of lateral extrusion in front of India indenter; main effect of collision is CW rotation of Indochina and extension along Sumatran active margin. Includes Oligocene arc polarity reversal in Sumatra, Timor is part of NW Australian margin, etc.)

Daly, M.C., B.G.D. Hooper & D.G. Smith (1987)- Tertiary plate tectonics and basin evolution in Indonesia. Proc. 16th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, p. 399-428.
(Late 1980's BP plate reconstructions of Tertiary of SE Asia since 55 Ma. (see also Daly et al. 1991))

Daly, M.C., B.G.D. Hooper & D.G. Smith (1989)- Tertiary plate tectonics and basin evolution in Indonesia. In: B. Situmorang (ed.) Proc. 6th Regional Conference Geology Mineral Hydrocarbon Resources of SE Asia (GEOSEA VI), Jakarta 1987, IAGI, p. 105-134.
(online at: https://www.iagi.or.id/web/digital/45/PIT-IAGI-1987-Paper-9.pdf)
(Same paper as Daly et al. (1987) above. With reconstructions since 70 Ma. N-ward motion of Australia started at ~50 Ma, at about same time as India-Eurasia collision and initiation of SE Asia Tertiary basins formation. Sumatra back-arc basins geometry of pull-apart basins between dextral strike-slip displacement. Banda-Celebs Sea (erroneously) viewed as trapped Mesozoic Indo-Australian oceanic crust?. Kutai- Tarakan- Barito-Makassar Straits basins viewed as Eocene back-arc extension along Pacific margin. Etc.)

Darian, J.P., A.L. Clark & Djumhani (1985)- A geologic and mineral resource assessment of Indonesia. East-West Resource Systems Institute, Honolulu, Working Paper 85-5, p. *(Unpublished?)*

Darman, H. & D. Harishidayat (eds.) (2025)- An outline of the geology of Indonesia, 2nd Edition. Indonesian Association Geologists (IAGI), Jakarta/ ITB Press Bandung, p. 1-320.
(Expanded update of Darman & Sidi (2000) book of the same title)

Darman, H. & Minarwan (eds.) (2017)- Seismic atlas of Indonesian basins, version 17.01. FOSI/ INDOGEO Special Publication.
(see also online version at: http://geoseismic-seasia.blogspot.com/p/home.html)
(24 chapters of Indonesian basins with short basin characterization and typical seismic lines)

Darman, H., D. Ralanarko, S.S. Suryono, H.G. Hartono, D. Nugroho, D. Syafitri & Abdurrokhim (2023)- Sandi stratigrafi Indonesia- Edisi 2023. Ikatan Ahli Geologi Indonesia (IAGI), Jakarta, p.
('Stratigraphic Nomenclature of Indonesia'. Update of 1996 Sandi Stratigrafi report)

Darman, H. & F.H. Sidi (eds.) (1999)- Tectonics and sedimentation of Indonesia. Proc. 1st Reg. Meeting Indonesian Sedimentologists Forum (FOSI), Bandung 1999, 99p.
(Symposium commemorating 50th anniversary Van Bemmelen (1949) book Geology of Indonesia)

Darman, H. & F.H. Sidi (eds.) (2000)- An outline of the geology of Indonesia. Indonesian Association Geologists (IAGI), Jakarta, p. 1-192.
(Concise overview of Indonesian geology by collective of 25 Indonesian geologists. Much of book also as online chapters on Wikipedia)

Darman, H., R.A. Tampubolon & M. Arisandy (2018)- Geological features observations in Eastern Indonesia based on selected P3GL seismic data. Berita Sedimentologi 40, p. 55-64.
(online at: http://www.iagi.or.id/fosi/berita-sedimentologi-no-40.html)
(Examples of P3GL seismic lines over several East Indonesia basins around Waigeo, Misool, Seram, Aru, etc.))

Darman, H. & D. Yuliong B.A. (2020)- Sedimentary basins of Indonesia: outline and thickness variation understanding. Berita Sedimentologi 45, p, 39-51.
(online at: https://www.iagi.or.id/fosi/files/2020/05/FOSI_BeritaSedimentologi_BS45-May_2020.pdf)
(Discussion of new INDOGEO sediment thickness map)

Das, S., H. Schoffel & F. Gilbert (2000)- Mechanism of slab thickening near 670 km under Indonesia. Geophysical Research Letters 27, 6, p. 831-834.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/1999GL010865)
(New data set of relocated earthquakes >400 km under Indonesia, developed by Schoffel and Das 1999. Slab thickens, shortens and weakens before penetrating below 670 km by shearing along conjugate fault planes on upper and lower portions of seismic zone)

De Bruyn, J.W. (1951)- Isogam maps of Caribbean Sea and surroundings and of Southeast Asia. Proc. 3rd World Petroleum Congress, The Hague 1951, Section 1, Brill, Leiden, p. 598-612.
(Two 1:10 million scale isogam maps based on published data and Royal Dutch Shell gravity surveys:(1) Caribbean Sea and surroundings; (2) SE Asia, including Indonesia, Philippines and New Guinea)

Decker, J., F. Ferdian, A. Morton, M. Fanning & L.T. White (2017)- New geochronology data from Eastern Indonesia- an aid to understanding sedimentary provenance in a frontier region. Proc. 41st Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, IPA17-551-G, p. 1-18.
(online at: https://www.researchgate.net/publication/317160752_New_Geochronology_Data_from_Eastern_Indonesia_-_An_Aid_to_Understanding_Sedimentary_Provenance_in_a_Frontier_Region)
(New zircon ages of igneous rocks in E Indonesia. Biotite-cordierite dacites (ambonites) from Ambon Pliocene (3-4 Ma), with inherited material from ~150-450 Ma. Banggai-Sula granites mainly M-L Triassic age (226-244 Ma), with inherited zircons of ~1000, ~1400-1500, 1800 and 2200 Ma. Birds Head granites similar Triassic ages (~235-248 Ma; roots of Triassic volcanic arc system). Bacan diorite ~330 Ma. Seram Triassic Kanikeh Fm sst same zircon age spectra as metasediments of Tanusa and Tehoru complexes. Sirga Fm quartz clastics in New Guinea Lst several units of different ages, derived from local uplifts in Eocene-Oligocene)

Deninger, K. (1914)- Einige Bemerkungen uber die Stratigraphie der Molukken und uber den Wert palaeontologischer Altersbestimmungen uberhaupt. Neues Jahrbuch Mineralogie Geologie Palaontologie 1910, 2, Abhandlungen, p. 1-15.
('Some remarks on the stratigraphy of the Moluccas and the value of paleontological age determinations'. Early discussion on significance of Mesozoic fossils of Buru and age of Buru Limestone)

Derksen, S.J. & J. McLean-Hodgson (1988)- Hydrocarbon potential and structural style of continental rifts: examples from East Africa and Southeast Asia. Proc. SE Asia Petroleum Exploration Society (SEAPEX) 8, p. 47-62.
(Review of continental rift systems, with examples from Tertiary basins of Sundaland. In intracratonic setting sedimentation typically non-marine during active graben formation; later regional subsidence may give rise to marine transgression in rifts near cratonic margins. Best potential source rocks in non-marine rifts lacustrine shales, with TOC up to 20%. Volume of oil generated may be very large for depocenter of limited areal extent. Long distance migration from oil kitchens (20 km) not common in continental rift settings. Basin size typically 20-60 km wide and 70-300 km in length)

De Smet, M.E.M. (1989)- A geometrically consistent plate-tectonic model for Eastern Indonesia. In: J.E. van Hinte et al. (eds.) Proc. Symposium Snellius II Expedition, Jakarta 1987, 1, Netherlands J. of Sea Research 24, 2/3, p. 173-183.
(E Indonesia plate tectonic model for last 10 Myr assuming six rigid rotating plates: Banda Sea, Buru-Seram, Sula, W Pacific, Irian Jaya, Australia)

De Smet, M.E.M. (1999)- On the origin of the outer Banda Arc. In: H. Darman & F.H. Sidi (eds.) Tectonics and sedimentation of Indonesia, FOSI-IAGI-ITB Regional Seminar to commemorate 50th anniversary of Van Bemmelen's Geology of Indonesia, Bandung 1999, p. 81-82. *(Abstract only)*
(Order of structure belts/ rocks around Banda Sea is not logical one in terms of plate tectonics. Outer Banda Arc not accretionary complex but compressed northern rim of Australian continental margin)

De Vos van Steenwijk, J.E. Baron (1946)- Plumb-line deflections and geoid in Eastern Indonesia as derived from gravity. Publ. Netherlands Geodetic Commission, Delft, p. 1-23.

(online at: https://www.ncgeo.nl/downloads/08DeVos.pdf)
(Calculations on gravity measurements by Vening Meinesz suggest irregularities in vertical gravity deflections and shape of geoid in E Indonesia. No discussion of geologic implications)

De Waele, B., P. Williams & G. Chan (2009)- Tectonic controls on the distribution of large copper and gold deposits in Southeast Asia to identify productive and non-productive structures. In: P.J. Williams et al. (eds.) Proc. 10th Biennual SGA Meeting, Smart science for exploration and mining, Townsville 2009, p. 933-935.
(Extended abstract) (On distribution of porphyry copper and epithermal gold deposits in SE Asia region and plate-tectonic controls)

Di Leo, J.F., J. Wookey, J.O. Hammond, J.M. Kendall, S. Kaneshima, H. Inoue, J.M. Yamashina & P. Harjadi (2012)- Mantle flow in regions of complex tectonics: insights from Indonesia. Geochem. Geophysics Geosystems 13, 12, p. 1-20.
(online at: http://onlinelibrary.wiley.com/doi/10.1029/2012GC004417/pdf)
(Seismic shear wave splitting indicates direction of mantle flow. Deformational features across Indonesian region: (1) block rotation history of Borneo reflected in coast-parallel fast directions; (2) mantle flow patterns in Sulawesi and Banda region: toroidal flow around Celebes Sea slab, oblique corner flow in Banda wedge, and sub-slab mantle flow around arcuate Banda slab; (3) evidence for deep, sub-520 km anisotropy at Java subduction zone; (4) Sumatran backarc trench-perpendicular fast orientations (mantle flow beneath overriding Eurasian plate?))

Durbaum, H.J. & K. Hinz (1984)- SEATAR-related geophysical studies by BGR in the Southwest Pacific. In: S.T. Watson (ed.) Transactions Third Circum-Pacific Energy and Mineral Resources Conference, Honolulu 1982, American Assoc. Petroleum Geol. (AAPG), p. 129-133.
(Brief summary of results of German BGR 1977-1981 geophysical surveys in Sulu Sea, Makassar Straits, Arafura Sea, Wharton Basin and Coral Sea. No clear seismic evidence of seafloor spreading in Makassar Straits)

Earle, W. (1845)- On the physical structure and arrangement of the islands of the Indian Archipelago. J. Royal Geographic Soc. London 15, p. 358-365.
(online at: https://ia601700.us.archive.org/35/items/jstor-1797916/1797916.pdf)
(Early depiction of major structural elements elements of Indonesian archipelago: two continental blocks ('Great Asiatic Bank' in W and 'Great Australian Bank' in SE, surrounded by mountain and volcanic ranges)

Edelman, C.H. (1941)- Studien over de bodemkunde van Nederlandsch-Indie. Veenman, Wageningen, p. 1-416.
(online at: https://edepot.wur.nl/480261)
('Studies on the soil science of Netherlands Indies'. Also 2nd Edition, 1947)

Edelman, C.H. (1946)- Fragmenten van het college “Bodemkunde van Nederlandsch-Indie”, Deel 1- Asgronden. Centrale Commissie voor Wageningse studenten, Publ. 5, p. 1-34.
(online at: https://edepot.wur.nl/201177)
(‘Excepts from introductory lectures on “Soil Scence of the Netherlands Indies”, part 1- Ash soils’. About soils in fresh volcanic material around active volcanoes (mainly Merapi, Kelud and Semeru volcanoes on Java))

Edelman, C.H. & W.F.J. van Beers (1939)- On mineralogical soil investigations, with special reference to the Netherlands Indies. Soil Research 6, 6, p. 339-351.
(online at: https://edepot.wur.nl/205646)

Elbert, J. (1911)- Die Sunda-Expedition des Vereins fur Geographie und Statistik zu Frankfurt am Main. Festschrift zur Feier des 75 jahrigen Bestehens des Vereins. Verein fur Geographie und Statistik, Hermann Minjon, Frankfurt, vol. 1, XXV, p. 1-274. *(online at: http://digital.staatsbibliothek-berlin.de/werkansicht?PPN=PPN683553704&PHYSID=PHYS_0009&DMDID=DMDLOG_0001)*
('The Sunda-Expedition of the Frankfurt Geographic Society, etc'. Report of 1910 geographic expedition led by Johannes Elbert to Bali, Lombok, Salayer, Tukang Besi, Muna, Buton, Rubia, Mengkoda, and parts of Java and

Sumatra. Main purpose of expedition was to explore geographic relationship between Asia and Australia. Rel. little geology)

Elbert, J. (1912)- Die Sunda-Expedition des Vereins fur Geographie und Statistik zu Frankfurt am Main, vol. II. Verein fur Geographie und Statistik, Hermann Minjon, Frankfurt, 15, p. 1-373.
(online at: http://digital.staatsbibliothek-berlin.de/werkansicht?PPN=PPN683554255&PHYSID=PHYS_0009&DMDID=DMDLOG_0001)
(Volume 2 of 'The Sunda-Expedition of the Frankfurt Geographic Society in 1910, etc.'. Covers islands Kabaena, Sumbawa, Flores and Wetar and geographic summaries)

Elbert, J. (1913)- Geosynklinale und Rahmenfaltung, Zerrungsgebirge und Vulkanismus im australasiatischen Archipel. Zeitschrift Gesellschaft Erdkunde Berlin, 1913, p. 224-230.
(online at: www.digizeitschriften.de/download/PPN391365657_1913/PPN391365657_1913___LOG_0060.pdf)
(Brief, early discussion of tectonics of Indonesian archipelago. No figures)

England, P., R. Engdahl & W. Thatcher (2004)- Systematic variation in the depths of slabs beneath arc volcanoes. Geophysical J. International 156, 2, p. 377-408.
(Depth to top subducting slab below Java volcanoes ~100km. Worldwide ranges 65-130 km. Inverse correlation between depth and descent speed of subducting plate. No correlation with age of subducting ocean floor or thermal parameters of slab)

Ernst, W.G., S. Maruyama & S. Wallis (1997)- Buoyancy-driven, rapid exhumation of ultrahigh-pressure metamorphosed continental crust. Proc. National Academy of Sciences USA 94, p. 9532-9537.
(online at: www.pnas.org/content/94/18/9532.full.pdf)
(Preservation of ultrahigh-pressure (UHP) minerals formed at depths of 90-125 km require unusual conditions. Our subduction model involves (1) underflow of continental crust embedded in cold, largely oceanic crust-capped lithosphere, (2) loss of leading portions of high-density oceanic lithosphere by slab break-off as increasing volumes of microcontinental material enter subduction zone, (3) buoyancy-driven return to mid-crustal levels of thin (2-15 km thick), low-density slice, (4) uplift, backfolding, normal faulting and exposure of UHP terrane. Intracratonal position of most UHP complexes reflects consumption of intervening ocean basin and introduction of sialic promontory into subduction zone. UHP metamorphic terranes consist chiefly of transformed continental crust (otherwise could not return to shallow depths). UHP paragneisses contain crustal diamonds. Banda Arc used as example)

ESCAP (1976)- Stratigraphic correlation between sedimentary basins in the ECAFE regions (Vols. 3 and 4) Proc. Special Regional Working Group, UN ECAFE Mineral Resources Development Series 42, p. 1-263.

Escher, B.G. (1933)- On the relation between the volcanic activity in the Netherlands East Indies and the belt of negative gravity anomalies discovered by Vening Meinesz. Proc. Koninklijke Nederlandse Akademie van Wetenschappen, Amsterdam, 36, 6, p. 677-685.
(online at: https://dwc.knaw.nl/DL/publications/PU00016465.pdf)
(Pre-plate tectonics paper exploring the apparent relationships between belts of active volcanoes, dipping zone of earthquakes and zone of negative gravity anomalies as recently identified by Vening Meinesz (early recognition of what became known in 1960's as Benioff-Wadati subduction zones; JTvG))

Escher, B.G. (1933)- Over het indirecte verband tusschen het vulkanisme in Ned.-Indie en de strook van negatieve anomalie van Vening Meinesz. Tijdschrift Koninklijk Nederlands Aardrijkskundig Genootschap (2), 50, 5, p. 727-740.
('On the indirect relationship between volcanism and Vening Meinesz' belt of negative gravity anomalies in E Indies'. (Escher supported Vening Meinesz' idea of significant horizontal movements of crust in the Indonesian region, a view disputed by Van Bemmelen (1933 and many other papers))

Escher, B.G., I.M. van der Vlerk, J.H.F. Umbgrove & P.H. Kuenen (eds.) (1931)- De palaeontologie en stratigraphie van Nederlandsch Oost-Indie, Leidsche Geologische Mededelingen 5 ('Feestbundel Prof. Dr. K. Martin'), 1, p. 1-648.
(online at: https://resolver.kb.nl/resolve?urn=MMKB24:062596000:pdf)
('The paleontology and stratigraphy of Netherlands East Indies'. Commerative volume at 80st birthday of Prof. Dr. K. Martin. Voluminous book with 20 chapters summarizing 'state of knowledge' of paleontology and stratigraphy in Netherlands East Indies. With listings of species and fossil localities and stratigraphic tables. No illustrations of fossils)

Evans, C.D., C.P. Brett, J.W.C. James & R. Holmes (1995)- Shallow seismic reflection profiles from the waters of east and southeast Asia: an interpretation manual and atlas. British Geological Survey (BGS) Overseas Division, Technical Report WC/94/60, p. 1-94.
(Includes shallow sparker profiles in Indonesia, illustrating Neotectonics of Lampung Bay (faults cutting Pleistocene sediments), Neotectonics and diapyrism off N Madura (Neogene-Recent compressional anticline, a diapyric structure and possible gas chimneys) and Seabed erosion of Sunda Shelf W of Kalimantan (incl. 20m deep/ 600m wide buried lowstand channels)

Fabian, T., J.M. Whittaker & D. Muller (2010)- Mapping Tertiary mid-ocean ridge subduction and slab window formation beneath Sundaland using seismic tomography. ASEG 2010 Conf., Sydney, Australia, Extended Abstracts, p. 1-4.
(online at: https://www.tandfonline.com/doi/abs/10.1081/22020586.2010.12041871)
(Slab windows form between diverging plates when mid-ocean spreading ridge is subducted. Seismic tomography shows break in high-velocity, downgoing Indian-Australian slab under Sundaland, at depths 950-1350km and longitudes 85°- 110°, supporting presence of slab window. Located ~5° further N and 10°-15° further W than previously proposed, implying Wharton Ridge subducted farther W than previously suggested)

Fairhead, J.D., I. Somerton & G. Gifford (2004)- A new global satellite gravity dataset for screening and evaluating offshore basins in S.E. Asia. In: R.A. Noble et al. (eds.) Proc. Deepwater and frontier exploration in Asia & Australia Symposium, Jakarta, Indonesian Petroleum Association (IPA), DFE04-PO-006, p. 1-7.
(New GETECH processing method ERS-1 and GEOSAT satellite gravity recovers gravity anomalies with wavelengths down to 10 km)

Fainstein, R. (1998)- Deep water exploration off Southeast Asia. Proc. Offshore South East Asia Conference Exhibition (OSEA98), Singapore, SEAPEX, p. 272. *(Abstract only)*

Fitch, T.J. (1970)- Earthquake mechanisms and island arc tectonics in the Indonesian-Philippine region. Bull. Seismological Society of America 60, 2, p. 565-591.
(One of first papers applying plate tectonics concepts to Indonesia. New focal mechanisms from shallow-focus earthquakes in Indonesian-Philippine region suggest dominant thrust and normal faulting rather than strike-slip faulting. Along Sunda and Philippine arcs most activity between ocean trench and line of active volcanoes. Mechanism solutions from earthquakes in this zone all thrust type (underthrusting beneath island arc))

Fitch, T.J. (1972)- Plate convergence, transcurrent faults and internal deformation adjacent to southeast Asia and western Pacific. J. of Geophysical Research 77, p. 4432-4460.
(Earthquake data used to delineate convergence and transcurrent fault zones in Indonesia. Weber Deep erroneously interpreted as NE continuation of Java-Banda Trench in earlier Fitch papers . See also comment by Audley-Charles and Milsom 1974)

Fitch, T.J. & W. Hamilton (1974)- Reply to Audley-Charles and Milsom comments on Fitch 1972 paper. J. of Geophysical Research 79, 32, p. 4982-4985.
(Authors agree with Audley-Charles and Milsom that Timor is product of collision of Banda island-arc system with continental shelf of Australia and New Guinea. Advancing arc has ramped up onto shelf, bulldozing shelf strata and incorporating them into imbricated and melanged material riding at front of arc. Timor trough, like

Java trench with which it is continuous to W, is angle between gently dipping undersliding southern continental crustal plate and wedge of shuffled material above it to N)

Fitch, T.J. & P. Molnar (1970)- Focal mechanisms along inclined earthquake zones in the Indonesia- Philippine region. J. of Geophysical Research 75, p. 1431-1444.
(28 new focal mechanisms for intermediate and deep-focus earthquakes in Indonesia-Philippine region. At intermediate depths of Sunda and Philippine arcs descending slab of lithosphere is under extension. Deep-focus mechanisms beneath Sunda arc suggest descending slab is under compression at great depth. In Banda Sea and N Celebes regions seismicity indicates possible contortions in underthrust slabs)

Fletcher, G.L. & R.A. Soeparjadi (1976)- Indonesia's Tertiary basins- the land of plenty. Proc. SEAPEX 1976, Offshore South East Asia Conference, Singapore, Paper 8, p. 1-54.
(Good overview of geology and hydrocarbon plays in Indonesian Tertiary basins)

Ford, R.J. (1988)- An empirical model for the Australasian tektite field. Australian J. Earth Sciences 35, p. 483-490.
(Australasian strewn-field contains radial sequence of tektite shapes ranging from rel. large unmodified impactite (Muong Nong type in S Laos, E Thailand), through dumb-bells and discs (thailandites, indochinites; 400-1000 km from impact site), and spheres (phillipinites, billitonites, javanites; 1000-3000 km from impact) to ablated button shapes (australites). Shapes of tektites from mainland SE Asia derived from uncongealed spinning glassy fragments passing through atmosphere. Sequence extends from suspected impact area in NE Cambodia to SE, to SE Australia and Tasmania)

Fortuin, A.R. & M.E.M. de Smet (1991)- Rates and magnitudes of Late Cenozoic vertical movements in the Indonesian Banda Arc and the distinction of eustatic effects. In: D.I.M. MacDonald (ed.) Sedimentation, tectonics and eustasy: sea level changes at active margins, Int. Association of Sedimentologists (IAS), Special Publ. 12, p. 79-89.

Fraser, A.J., S.J. Matthews & R.W.Murphy (eds.) (1997)- Petroleum geology of SE Asia. Geological Society, London, Special Publ. 126, p. 1-427.
(Good collection of papers on SE Asia tectonics, basins and hydrocarbon plays)

Fugro-Robertson (2008)- Exploration opportunity screening: Eastern Indonesia-Papua New Guinea. Multi-client study, vol. I: Text; vol. II: Enclosures. *(Unpublished)*

Gage, M.S. & R.S. Wing (1980)- Southeast Asian basin-types versus oil opportunities. Proc. 9th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, p. 124-147.
(Genetic classification of 63 SE Asia basins. Over 35 billion bbl oil found, another 35 remains to be found. Four of 11 recognized basin types contain 84% of all SE Asian oil: ocean margin, backarc, wrench and suture-related basins)

Gaina, C. & D. Muller (2007)- Cenozoic tectonic and depth/age evolution of the Indonesian gateway and associated back-arc basins. Earth-Science Reviews 83, p. 177-203. *(online at: https://www.researchgate.net/publication/222299118_Cenozoic_tectonic_and_depthage_evolution_of_the_Indonesian_gateway_and_associated_back-arc_basins)*
(Reconstruction of tectonics and depth history of Indonesian seaway and associated SE Asian back-arc basins. All marginal seas N of Australia formed in back-arc setting, with Caroline (37-24 Ma) and Celebes Seas (48-35 Ma) opening N of N- dipping subduction zone, and Solomon Sea (42-33 Ma) S of S- dipping subduction. Several major tectonic events N of Australia at ~45 Ma, related to relocation of subduction zone NW of Australia under Philippine Sea plate due to collision and accretion of old Pacific plate material to N-subducting Australian plate. Negative anomalous depth of several back-arc basins is ~650-800m (range 300-1100m), accompanied by negative regional heatflow anomalies, suggesting mantle-driven dynamic topography. Tomography shows marginal basins with negative dynamic topography underlain by massive buried slab material, suggesting negative dynamic topography and heatflow anomalies due to basin formation above slab burial grounds)

Gao, J., Y. Yu, W. Song, S.S. Gao & K.H. Liu (2020)- Crustal modifications beneath the central Sunda plate associated with the Indo-Australian subduction and the evolution of the South China Sea. Physics Earth Planetary Interiors 306, 1065, p. 1-9.
(online at: https://web.mst.edu/sgao/publications/pdfs/103.pdf)
(Significant heterogeneities in crustal thickness and structure beneath central Sunda plate of SE Asia from seismic velocity dist ributions. Crustal thickening at NE Borneo, probably due to underthrust of Nansha block since S-ward Proto-SCS subduction. Sibumasu terrane crust at least 3 km thinner than East Malay block, possibly induced by joint effects of Cenozoic rifting and thermal anomaly, Etc.)

Gao, Y., Y. Wang, C.K. Morley, Y. Wang, X. Qian & Y. Wang (2024)- Cenozoic thermal-tectonic evolution of Sundaland: constraints from low-temperature thermochronology. Earth-Science Reviews 254, 104812, p.
(Cenozoic exhumation history of Sundaland based on existing low-T thermochronologic data and new apatite and zircon fission track ages from S Vietnam and Borneo. Early Cenozoic regional transpression controlled widespread Paleogene exhumation due to early oblique collision. Local exhumation of lower crustal units, young granite plutons during Oligocene-Miocene driven by rifting, block lateral extrusion, structural inversion, and buoyant doming. Borneo experienced diachronous exhumation likely due to subduction of Proto-South China Sea, collision with Australian terrane(s) and dynamic support from mantle. Etc.)

Garwin, S.L. (1997)- The settings and styles of gold mineralisation in Southeast Asia. Bull. Geological Society Malaysia 40, p. 77-111.
(online at: https://gsm.org.my/wp-content/uploads/gsm_file_2/702001-100886-PDF.pdf
(Majority of gold in SE Asia in porphyry (64%), low-sulfidation epithermal (17%), carbonate-base metal-gold (7%) and skarn (4%) deposits. 90% of these deposits (>95% of gold) associated with 14 middle to late Cenozoic magmatic arcs)

Garwin, S., R. Hall & Y. Watanabe (2005)- Tectonic setting, geology and gold and copper mineralization in Cenozoic magmatic arcs of Southeast Asia and the West Pacific. Economic Geology 100, p. 891-930.
(online at: http://searg.rhul.ac.uk/pubs/garwin_et_al_2005%20Au-Cu%20Cenozoic%20magmatic%20arcs%20SE%20Asia-West%20Pacific_hires.pdf)
(Gold and copper deposits in SE Asia and W Pacific largely in M-L Cenozoic (25-1 Ma) magmatic arcs. Twenty major arcs and several less extensive Cenozoic arcs form complex border to Sundaland core and N margin of Australian continent. Three major plate reorganizations at ~45, 25 and 5 Ma, characterized by collisional events that changed plate boundaries and motions. Most deposits developed during episodes of plate reorganization. Hydrothermal systems active for durations of <100,000 years)

Garwin, S., R. Hall & Y. Watanabe (2005)- Descriptions of the geologic settings and mineral deposit styles for major Cenozoic magmatic arcs of Southeast Asia and the West Pacific. Appendix I of Garwin, S., R. Hall & Y. Watanabe (2005), Economic Geology 100, p. 1-32.
(Descriptions of major Cenozoic volcanic arcs and associated mineral deposits from Japan through Philippines to Indonesia/ New Guinea)

Genrich, J.F., Y. Bock, R. McCaffrey, E. Calais, C.W. Stevens & C. Subarya (1996)- Accretion of the southern Banda Arc to the Australian plate margin determined by global positioning system measurements. Tectonics 15, 2, p. 288-295.
(GPS measurements show Australian continent has accreted to Banda arc. Timor Trough now mostly inactive. Most of Australia- Eurasia convergence appears to occur as N-ward translation of Banda Arc, with shortening on Flores and Wetar thrusts)

Geological Agency/ Badan Geologi (2022)- Peta Cekungan sedimen Indonesia, 1:5000,000. Ministry of Energy and Mineral Resources, Geological Survey of Indonesia, Bandung.
(online at: https://geologi.esdm.go.id/geolindo/cekungan) (print version online at: https://www.esdm.go.id/assets/media/content/content-peta-cekungan-sedimen-indonesia-2022.pdf)

('Sedimentary basin map of Indonesia'. Latest (2202) edition of 2009, 2020, etc. map of Indonesian sedimentary basins, color-coded by age and labeled by basin type)

Geological Survey of Indonesia (2008)- Gravity anomaly map of Indonesia, 1: 1,000,000.

Geological Survey of Japan (2004)- Digital geologic map of East and Southeast Asia, 1: 2,000,000, 2nd ed. Digital Geoscience Map Series G-2, CD-ROM.

Ghose, R. & K. Oike (1988)- Characteristics of seismicity distribution along the Sunda Arc: some new observations. Bull. Disaster Prevention Research Institute, Kyoto University, 38, 2, p. 29-48.
(online at: https://repository.kulib.kyoto-u.ac.jp/items/754781b2-1bc6-4fcd-945b-736a6fd70457)
(Depth distribution of earthquakes revealed zone of rare seismicity at intermediate depth in eastern Sunda arc)

Ghose, R., S. Yoshioka & K. Oike (1990)- Three-dimensional numerical simulation of the subduction dynamics in the Sunda arc region, Southeast Asia. Tectonophysics 181, p. 223-255.

Gingele, F.X., P. De Deckker & C.D. Hillenbrand (2001)- Clay mineral distribution in surface sediments between Indonesia and NW Australia- source and transport by ocean currents. Marine Geology 179, p. 135-146.

Gough, A. (2022)- Sweating the small stuff! How large datasets can help develop regional palaeogeographies around SE Asia. Proc. SEAPEX-PESGB Asia Pacific E&P Conference, London 2022, p. 1-29. *(Abstract + Presentation))*
(Overview of large amount of SE Asia geological data collected during 40 years of fieldwork and other data compilation by members of the SE Asia Research Group at Royal Holloway, University of London (since then moved to Edinburgh))

Gough, A. & M. Webb (2024)- Cenozoic palaeogeographies of Sundaland: Unveiling the dynamics from mountain uplifts to peneplanation. Proc. GESGB-SEAPEX Asia Pacific Conference, Exploring Asia Pacific's Energy Future, London 2024, Abstract + 28p. powerpoint presentation)
(Summary of SE Asia Research Group (SEARG) provenance work in Sumatra, Natuna, etc.. SE Asia unusually high sediment yields during Cenozoic)

Granath, J.W., J. Christ, D. Fairhead & W. Dickson (2001)- Tertiary tectonic compilation in a GIS for Indonesia. Proc. 28th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, p. 345-351.
(E Indonesia tectonic blocks in GIS format)

Green, R., J.S. Adkins, H.J. Harrington & M. Untung (1979)- Bouguer gravity anomaly map of Indonesia. University of New England, Armidale, Australia.

Green, R., J.S. Adkins, H.J. Harrington & M. Untung (1981)- Bouguer gravity map of Indonesia. Tectonophysics 71, p. 267-280.
(Summary of 1:5M map; map not included)

Grevemeyer, I. & V.M. Tiwari (2006)- Overriding plate controls spatial distribution of megathrust earthquakes in the Sunda-Andaman subduction zone. Earth Planetary Science Letters 251, p. 199-208.
(Thermal models and structural constraints derived from seismic and gravity data used to explain seismogenic behaviour in Sunda subduction zone. With respect to Java, oblique subduction of young oceanic crust shifts seismogenic coupling zone roughly 40 km trenchward offshore of N Sumatra and increases width of locked megathrust. Prominent positive gravity anomaly offshore Java caused by shallow mantle wedge underlying forearc basin. Serpentinized mantle wedge would limit width of coupling zone to 30-40 km, compared to N120 km off Sumatra. Sumatra remains therefore most vulnerable for future megathrust earthquakes, while shallow mantle wedge may limit violence of rupture off Java)

Gribi, E.A. (1973)- Tectonics and oil prospects of the Moluccas, Eastern Indonesia.In: B.K. Tan (ed.) Proc. Regional Conference on the Geology of SE Asia, Kuala Lumpur 1972, Bull. Geological Society Malaysia 6, p. 11-16.
(online at: www.gsm.org.my/products/702001-101357-PDF.pdf)
(Early brief review of tectonics and oil prospectivity of E Indonesia)

Gribi, E.A. (1974)- Petroleum geology of the Moluccas, Eastern Indonesia. Proc. SEAPEX 1973 Conf., Singapore, 1, p. 23-30.
(Older, brief overview of potential hydrocarbon plays in E Indonesia (mainly Ceram))

Griffiths, J.R. & C.F. Burrett (1973)- Were South-East Asia and Indonesia parts of Gondwanaland? Nature Physical Science 245, p. 92-93.
(Brief comments on recent Ridd et al. (1971) and Audley-Charles (1972) SE Asia plate reconstructions, in which India was placed adjacent to W Australia and against Antarctica)

Grunau, H.R. (1965)- Radiolarian cherts and associated rocks in space and time. Eclogae Geologicae Helvetiae 58, p. 157-206.
(online at: https://www.e-periodica.ch/digbib/view?pid=egh-001:1965:58#3)
(Review of radiolarian cherts worldwide, incl. descriptions of ?Jurassic Danau Fm and Cretaceous Lupar Fm of Borneo, and similar rocks from Sumatra, Triassic and Cretaceous of Seram, Cretaceous of Timor, Jurassic-Cretaceous of E Sulawesi and Triassic of Malay Peninsula. Radiolarian cherts typical deep water 'geosynclinal' deposits (mainly Tethys eugeosyncline), typically intensely folded and associated with turbidites and ophiolites. As already concluded by Molengraaff (1909) these are remnants of former ocean basins)

Guntoro, A. (1995)- Tectonic evolution and crustal structure of the Central Indonesian region from geology, gravity and other geophysical data. Ph.D. Thesis University College London (UCL), p. 1-335.
(online at: https://discovery.ucl.ac.uk/id/eprint/10101581/1/Tectonic_evolution_and_crustal.pdf)
(Central Indonesian Region (CIR) represents transition between mainly Eurasian elements of W Indonesia and Pacific-Australian elements of E Indonesia. Bounded by two subduction zones: in W by pre-Tertiary subduction zone at SE Sundaland margin, to E by Early Tertiary subduction zone (Selayar-Bonerate ridge). Variations in gravity demonstrate that continental crust in CIR was attenuated by subduction roll-back and then subjected to rifting by extensional forces. Extension in Makassar Strait, C Java Sea and E Java Sea in Eocene, forming marginal basins. Bone Bay opened due to collision between Banggai- Sula microcontinent and Sulawesi in M Miocene and was followed by CW rotation of Java, Sumbawa and Flores, which caused opening of Flores Sea (thesis supervised by J. Milsom))

Guntoro, A. (1999)- A new propose of geological division in the Indonesian archipelago from tectonic evolution point of view. In: H. Darman & F.H. Sidi (eds.) Tectonics and sedimentation of Indonesia, FOSI-IAGI-ITB Regional Seminar to commemorate 50th anniversary of Van Bemmelen's Geology of Indonesia, Bandung 1999, p. 20-21. *(Extended Abstract)*
(Indonesian archipelago often divided into E and W parts, with boundary in Makassar Straits and Lombok Strait. New subdivision introducing C Indonesia Province, transition between Eurasian W Indonesia and Pacific- Australasian related elements of E Indonesia. Boundary between W and C Indonesian regions is Pre-Tertiary subduction zone at SE Eurasian margin. Boundary between C and E Indonesia at Paleogene subduction complex accreted to this margin, marked by Selayar-Bonerate Ridge, separating Flores and Banda Seas. C Indonesian region Cretaceous- Eocene site of complex subduction, fore arcs and magmatic arcs and subsequent opening of Makassar Strait)

Guzman-Speziale, M. (2024)- Oblique plate convergence along arcuate trenches on a spherical Earth. An example from the Western Sunda Arc. Acta Geophysica 72, p. 7-27.
(online at: https://link.springer.com/article/10.1007/s11600-023-01163-9)
(Eight arc-like segments along W Sunda arc-trench system. Obliquity angles vary from 92° in N-most (Burmese) arc to 7° offshore Sunda strait between Sumatra and Java. Angle of obliquity offshore Sumatra 31°)

Hafkenscheid, E. (2004)- Subduction of the Tethys oceans reconstructed from plate kinematics and mantle tomography. Ph.D. Thesis University of Utrecht, Geologica Ultraiectina 241, p. 1-191.
(online at: http://dspace.library.uu.nl/handle/1874/591)
(On large-scale history of subduction win Tethyan region from Mediterranean to Indonesian archipelago by combining plate tectonic reconstructions with independent seismic tomography results. Plate tectonic reconstructions of Tethyan region generally agree on first-order motions. E Tethyan region characterised by active subduction of various oceanic basins. Subduction zones modelsfrom regional tectonic reconstructions, converted into seismic velocity anomalies, which are compared to tomographic images of mantle structure)

Hafkenscheid, E., S.J.H. Buiter, M.J.R. Wortel, W. Spakman & H. Bijwaard (2001)- Modelling the seismic velocity structure beneath Indonesia: a comparison with tomography. Tectonophysics 333, p. 35-46.
(Generally good agreement between modeled tomography velocity structure and Rangin (1999) and Lee & Lawver (1995) plate reconstructions)

Hafkenscheid, E., M.J.R. Wortel & W. Spakman (2006)- Subduction history of the Tethyan region derived from seismic tomography and tectonic reconstructions. J. of Geophysical Research 111, B08401, p. 1-26.
(Seismic tomography interpretation, mainly on Western Tethys)

Haile, N.S. (1973)- The recognition of former subduction zones in Southeast Asia. In: D.H. Tarling & S.K. Runcorn (eds.) Implications of continental drift to the earth sciences, vol. 2, Academic Press, London, p. 885-892.
(Early paper on plate tectonics application in SE Asia, focused around West Borneo- Malay Peninsula area)

Haile, N.S. (1976)- The regional implications of paleomagnetic research in Southeast Asia. Proc. SE Asia Petroleum Exploration Society (SEAPEX) Conference 3, Singapore, p. 39-44.
(Review of recent paleomagnetic work in SE Asia. Cretaceous rocks from W Kalimantan suggest this part of Borneo lay on equator, as Malay Peninsula with which it formed part of single plate, which subsequently rotated ~45°. Late Mesozoic radiolarian cherts from SW arm of Sulawesi also indicate low latitudes and CCW rotation of 35°. At W end of Seram late Cenozoic Kelang Fm rotated probably anticlockwise ~80°. Triassic rocks from S C Seram high magnetic inclination, indicating origin in higher latitudes (~26°) than today (see also Haile 1978, 1981))

Haile, N.S. (1978)- Progress report on paleomagnetic research in Southeast Asia. In: Wiryosujono & A. Sudradjat (eds.) Proc. 2nd Regional Conference Geology and Mineral Resources of SE Asia (GEOSEA), Jakarta 1975, Indonesian Association Geologists (IAGI), p. 33-36.
(online at: https://www.iagi.or.id/web/digital/32/PIT-IAGI-1975-Paper-4.pdf)
(New paleomagnetic research suggests Malay Peninsula moved S ~15° and rotated ~31° clockwise (CW) since Late Paleozoic. Malay Peninsula and West Kalimantan rotated together by ~40° CCW since Cretaceous, similar to SW Sulawesi)

Haile, N.S. (1981)- Paleomagnetism of Southeast and East Asia. In: M.W. McElhinny & D.A. Valencio (eds.) Paleoreconstruction of the continents, American Geophysical Union (AGU), Geodynamics Series 2, p. 129-135.
(Summary of paleomagnetic results from Borneo, Sumatra (40° CW rotation since Mesozoic, 34° of which accomplished since Oligocene), Sulawesi, Sumatra, Sumba, Timor, Seram (Seram at 12°S in Late Triassic, rotated CCW 98° since then). Late Mesozoic of W Kalimantan and SW Sulawesi little change from present latitude, but 49° and 33° CCW rotation)

Haile, N.S. (1981)- Paleomagnetic evidence and paleotectonic history and paleogeography of eastern Indonesia. In: A.J. Barber & S. Wiryosujono (eds.) The geology and tectonics of Eastern Indonesia, Proc. CCOP-IOC SEATAR Working Group Meeting, Bandung 1979, Geological Research Development Centre (GRDC), Bandung, Special Publ. 2, p. 81-87.
(Seram 74° anticlockwise rotation since Late Miocene. Timor Permian Cribas Fm higher paleolatitude (34°) than Maubisse Fm (27°), but within margin of error. SW Sulawesi E Cretaceous radiolarian chert formed at

~3° and, together with Kalimantan and Malay Peninsula, may have rotated 30-40° anticlockwise since Jurassic. Similar cherts from E arm of Sulawesi formed at 42°S)

Haile, N.S. & J.C. Briden (1983)- Past and future paleomagnetic research and tectonic history of East and Southeast Asia. In: J.C. Briden (ed.) Proc. CCOP Workshop Paleomagnetic Research in E and SE Asia, Kuala Lumpur 1982, p. 25-46.

Hall, R. (1990)- Subduction-related ophiolite terrains: evidence from Southeast Asia. In: J. Malpas et al. (eds.) Ophiolites: oceanic crustal analogues, Geological Survey Cyprus, 1987, p. 449-460.

Hall, R. (1995)- Plate tectonic reconstructions of the Indonesian region. Proc. 24th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, 1, p. 71-84.
(online at: http://searg.rhul.ac.uk/pubs/hall_1995_IPA%20reconstructions.pdf)
(Early version of R. Hall SE Asia plate reconstructions series, Eocene (50 Ma) - Recent)

Hall, R. (1996)- Reconstructing Cenozoic SE Asia. In: R. Hall & D. Blundell (eds.) Tectonic evolution of Southeast Asia, Geological Society, London, Special Publ. 106, p. 153-184.
(online at: http://searg.rhul.ac.uk/pubs/hall_1996%20Reconstructing%20Cenozoic%20SE%20Asia.pdf)
(Major review of plate reconstructions of SE Asia at 5 Ma intervals for past 50 Ma)

Hall, R. (1997)- Cenozoic plate tectonic reconstructions of SE Asia. In: A.J. Fraser et al. (eds.) Petroleum geology of Southeast Asia, Geological Society, London, Special Publ. 126, p. 11-23.
(online at: http://searg.rhul.ac.uk/searg_uploads/2016/04/2.pdf)

Hall, R. (1997)- Cenozoic tectonics of SE Asia and Australasia. In: J.V.C. Howes & R.A. Noble (eds.) Petroleum systems of SE Asia and Australasia, Indonesian Petroleum Association (IPA), Jakarta, p. 47-62.

Hall, R. (1998)- The plate tectonics of Cenozoic SE Asia and the distribution of land and sea. In: R. Hall & J.D. Holloway (eds.) Biogeography and geological evolution of SE Asia, Backhuys Publishers, Leiden, p. 99-131.
(SE Asia plate reconstructions 50 Ma-Recent)

Hall, R. (1998)- Cenozoic tectonics of South East Asia: myths, models and methods; reconstructions, implications and speculations. Proc. Offshore South East Asia Conference Exhibition (OSEA98), Singapore, SEAPEX, p. 69-72.
(Brief review of issues in SE Asia tectonic models. Three important periods in regional development: ~45 Ma, 25 Ma and 5 Ma, when plate boundaries and motions changed, probably due to major collision events. Little indication that India was driving force of tectonics in SE Asia. Principal 'myths': myth of India indentor, myth of Australian micro-continent collision events and myth of convergence in New Guinea. No figures)

Hall, R. (2001)- Extension during Late Neogene collision in East Indonesia and New Guinea. J. Virtual Explorer 4, p. 1-13.
(Important plate motion changes in SE Asia- W Pacific region at ~45 Ma, 25 Ma and 5 Ma. Australia and SE Asia made contact at ~25 Ma, with collision-related deformation in Sulawesi and between Philippines-Halmahera- S Caroline Arc and New Guinea. Ophiolites obducted in SE Sulawesi in E Miocene)

Hall, R. (2001)- Cenozoic reconstructions of SE Asia and the SW Pacific: changing patterns of land and sea. In: I. Metcalfe et al. (eds.) Faunal and floral migrations and evolution in SE Asia-Australasia. Balkema, Lisse, p. 35-56.

Hall, R. (2002)- Cenozoic geological and plate tectonic evolution of SE Asia and the SW Pacific: computer-based reconstructions, model and animations. J. Asian Earth Sciences 20, 4, p. 353-431.
(online at: http://searg.rhul.ac.uk/searg_uploads/2016/01/Hall_2002_JAES1-1.pdf)
Most comprehensive of R. Hall papers on SE Asia- SW Pacific plate reconstructions from Early Eocene (55 Ma) - Recent. See also updated/ expanded version of Hall (2012))

Hall, R. (2008)- Continental growth at the Indonesian margins of SE Asia. In: J.E. Spencer & S.R. Titley (eds.) Ores and orogenesis: Circum-Pacific tectonics, geologic evolution and ore deposits, Arizona Geological Society Digest 22, p. 245-258.
(Indonesia continental core reassembled from blocks rifted from Gondwana, and surrounded by subduction zones for much of Mesozoic and Cenozoic. Weak and thin lithosphere beneath much of Sundaland, responsive to changing forces at the plate boundaries. Continental growth mainly by arrival of continental fragments at subduction margins, with subordinate contributions from ophiolite and sediment accretion or arc magmatism)

Hall, R. (2009)- Southeast Asia's changing palaeogeography. Blumea- biodiversity, evolution and biogeography of plants 54, 1-3, p. 148-161.
(online at: http://www.ingentaconnect.com/content/nhn/blumea/2009/00000054/f0030001/art00026#)
(SE Asia grew incrementally by addition of continental fragments, mainly rifted from Australia, and added to margins of Sundaland as result of subduction. Sundaland almost permanent land area from beginning of Mesozoic. Addition of continental fragments of SW Borneo and later East Java-W Sulawesi formed larger emergent land area by Late Cretaceous. Subduction resumed at Sundaland margin in Eocene, leading to widespread rifting within Sundaland and formation of Makassar Straits. Australia began to collide with SE Asia at ~25 Ma, effectively closing former deep ocean between two continents)

Hall, R. (2009)- Hydrocarbon basins in SE Asia: understanding why they are there. Petroleum Geoscience 15, 2, p. 131-146.
(online at: http://searg.rhul.ac.uk/pubs/hall_2009_SE%20Asia%20hydrocarbon%20basins.pdf)
Almost all hydrocarbon basins in SE Asia began to form in Early Cenozoic and filled with Cenozoic sediments. Most are rifted basins formed by regional extension on continental crust. Weakness of Sundaland lithosphere, unusually responsive to changing forces at plate edges, meant that basins record complex tectonic history)

Hall, R. (2009)- The Eurasian SE Asian margin as a modern example of an accretionary orogen. In: P.A. Cawood & A. Kroner (eds.) Earth accretionary systems in space and time, Geological Society, London, Special Publ. 318, p. 351-372.
(online at: http://searg.rhul.ac.uk/pubs/hall_2009_SE_Asia%20accretionary_orogen.pdf)
https://www.semanticscholar.org/paper/The-Eurasian-SE-Asian-margin-as-a-modern-example-of-Hall/31cc79d9ba49467fd9e40646061dcdf6d4a49ba0
(Eurasian margin in SE Asia surrounds Sundaland continental core. Continental growth since Cretaceous in episodic way, related primarily to arrival of continental fragments at subduction margins, after which subduction resumed in new locations. There have been subordinate contributions from ophiolite accretion, and arc magmatism. Relatively small amounts of material accreted during subduction from downgoing plate. In E Indonesia the wide plate boundary zone includes continental fragments and several arcs. (This paper is first of several versions showing Early Cretaceous age of addition of SW Borneo Block to Sundaland and Late Cretaceous addition of E Java- W Sulawesi accreted block outboard of Meratus- C Java trend))

Hall, R. (2009)- Indonesia, Geology. In: R.G. Gillespie & D.A. Clague (eds.) The Encyclopedia of islands, University of California Press, p. 454-460.
(online at: http://searg.rhul.ac.uk/pubs/hall_2009_Indonesia%20Islands.pdf)
(Brief review of geology of Indonesia)

Hall, R. (2011)- Australia-SE Asia collision: plate tectonics and crustal flow. In: R. Hall, M.A. Cottam & M.E.J. Wilson (eds.) The SE Asian gateway: history and tectonics of the Australia-Asia collision, Geological Society, London, Special Publ. 355, p. 75-109.
(online at: http://searg.rhul.ac.uk/pubs/hall_2011%20crustal%20flow%20SE%20Asia.pdf)
(Jurassic- Recent Indonesia tectonic reconstruction. Sundaland core of SE Asia is heterogeneous assemblage of Tethyan sutures and Gondwana fragments. Fragments that rifted from Australia in Jurassic collided with Sundaland in Cretaceous and terminated subduction. From 90-45 Ma Sundaland surrounded by inactive margins with localized strike-slip deformation, extension and subduction. At 45 Ma Australia began to move N and subduction resumed beneath Sundaland. At 23 Ma Sula Spur promontory collided with Sundaland margin.

From 15 Ma subduction hinge rollback into Banda oceanic embayment, major extension, and later collision of Banda volcanic arc with S margin of embayment. Sundaland has weak thin lithosphere, highly responsive to plate boundary forces and hot weak deep crust flowed in response to tectonic and topographic forces and sedimentary loading. Gravity-driven movements of upper crust, unusually rapid vertical motions, exceptionally high rates of erosion and massive movements of sediment characterized region)

Hall, R. (2011)- SE Asian reconstructions, plate tectonics and crustal flow- any importance for hydrocarbon exploration? SEAPEX Exploration Conference, Singapore 2011, Presentation, 82p. *(Abstract and presentation)*
(Most of SE Asia not rigid plate or multiple rigid microplates bounded by lithospheric faults. Sundaland formed by collision of Sibumasu and E Malaya-Indochina in Triassic and other fragments rifted from Australia in late Jurassic- E Cretaceous were added in Cretaceous (now in Borneo, Java, Sulawesi))

Hall, R. (2012)- Late Jurassic-Cenozoic reconstructions of the Indonesian region and the Indian Ocean. Tectonophysics 570-571, p. 1-41.
(online at: www.sciencedirect.com/science/article/pii/S0040195112002533)
(Mesozoic- Cenozoic plate tectonic reconstructions. Luconia-Dangerous Ground continental block rifted from E Asia and was added to E Sundaland N of Borneo in Cretaceous. Banda (SW Borneo) and Argo (E Java- W Sulawesi) blocks separated from NW Australia and collided with SE Asia between 110- 90 Ma. At 90 Ma Woyla intra-oceanic arc collided with Sumatra margin. Subduction beneath Sundaland terminated at this time. Between 90-45 Ma Australia remained close to Antarctica and there was no significant subduction beneath Sumatra and Java, while Sundaland was surrounded by inactive margins with some strike-slip deformation and extension, except for subduction beneath Sumba- W Sulawesi between 63- 50 Ma. At 45 Ma Australia began to move N; subduction resumed beneath Indonesia and has continued to present. Cenozoic deformation influenced by deep structure of Australian fragments added to Sundaland core, shape of Australian margin formed during Jurassic rifting, and age of now-subducted ocean lithosphere)

Hall, R. (2012)- Sundaland and Wallacea: geology, plate tectonics and palaeogeography. In: D.J. Gower et al. (eds.) Biotic evolution and environmental change in Southeast Asia, The Systematics Association, Cambridge University Press, Chapter 3, p. 32-78.
(online at: http://searg.rhul.ac.uk/pubs/hall_2012%20Sundaland%20&%20Wallacea.pdf)
(Plate tectonic and paleogeographic reconstructions since 80 Ma)

Hall, R. (2012)- East Indies. In: McGraw-Hill Encyclopedia of Science and Technology, 11th Ed., 5, p. 850-853.

Hall, R. (2013)- The palaeogeography of Sundaland and Wallacea since the Late Jurassic. J. Limnology 72, 2, p. 1-17.
(online at: www.jlimnol.it/index.php/jlimnol/article/view/685)
(Asia-Pacific boundary active continental margin until M Cretaceous. Subduction ceased around Sundaland in Late Cretaceous. From ~80 Ma most of Sundaland emergent and connected to Asia. One or more India-volcanic collisions in Eocene may have preceded India-Asia collision. During Late Cretaceous- E Cenozoic no significant subduction beneath Sumatra, Java and Borneo, until ~45 Ma when Australia began to move N; also time widespread rifting within Sundaland. During Paleogene E and N Borneo largely submerged. By E Miocene proto-South China Sea had been eliminated by subduction leading to emergence of land in C Borneo, Sabah and Palawan. Microplate or terrane concept of slicing fragments from New Guinea followed by multiple collisions in Wallacea implausible. Neogene subduction drove extension and fragmentation of Wallacea)

Hall, R. (2014)- Indonesian tectonics: subduction, extension, provenance and more. Proc. 38th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, IPA14-G-360, p. 1-13.
(online at: http://searg.rhul.ac.uk/pubs/hall_2014%20Indonesian%20tectonics.pdf)
(Mainly summary of recent Royal Holloway group research. In E Indonesia subduction zones at different stages of development, from mature examples like Banda system that began to roll back from ~16 Ma, to younger systems such as N Sulawesi. Close relationship between subduction and extension, causing both dramatic elevation of land regions with exhumation of deep crust, and spectacular subsidence of basins. Many

metamorphic rocks in Indonesia proved to be younger than previously suggested (SW Borneo, N and C Sulawesi, Seram). Triassic igneous and metamorphic rocks at W end of Schwaner region and N of Pontianak suggesting suture between Sundaland and SW Borneo further E than previously postulated)

Hall, R. (2014)- The origin of Sundaland. In: I. Basuki & A.Z. Dahlius (eds.) Sundaland Resources, Proc. Annual Conv. Indonesian Soc. Economic Geologists (MGEI), Palembang, p. 1-25.
(online at: http://searg.rhul.ac.uk/pubs/hall_2014%20Sundaland%20origin.pdf)
(Updated version of SE Asia plate tectonic reconstruction. Core of SE Asia was assembled from continental blocks that separated from Gondwana in Paleozoic and amalgamated with Asian blocks in Triassic. Some fragments rifted and separated from Asia and later re-amalgamated with western part of SE Asian continental core in Mesozoic. Fragments of Cathaysian/Asian continental crust form parts of N Borneo and offshore shelf N of Sarawak and E of Vietnam. Other continental blocks rifted from Australia in Jurassic (SW Borneo, E Java-W Sulawesi, Sabah-NW Sulawesi, S Sulawesi-Sumba) and Woyla intra-oceanic arc of Sumatra and were added to Sundaland in Cretaceous. Subduction ceased around Sundaland in early Late Cretaceous)

Hall, R. (2017)- Southeast Asia: new views of the geology of the Malay Archipelago. Annual Review Earth Planetary Sciences 45, p. 331-358.
(online at: https://www.annualreviews.org/content/journals/10.1146/annurev-earth-063016-020633)
(Recent review of SE Asia tectonics. W part of SE Asia (Sundaland) heterogeneous and weak region, not underlain by thick, cold Precambrian lithosphere like typical cratons. In E subduction zones in different stages of development. Metamorphism in many parts of E Indonesia much younger than previously assumed. Close relationship between subduction rollback and extension, causing dramatic elevation of land, exhumation of deep crust and spectacular subsidence of basins)

Hall, R. (2018)- The subduction initiation stage of the Wilson cycle. In: R.W. Wilson et al. (eds.) Fifty years of the Wilson cycle concept in plate tectonics, Geological Society, London, Special Publ. 470, p. 415-437.
(online at: https://www.lyellcollection.org/doi/full/10.1144/SP470.3)
(Discussion of initiation of subduction process, with examples from East Indonesia (Banda, Sulawesi-Philippines). Banda subduction developed by E-wards propagation of Java trench into an oceanic embayment by tearing along former ocean-continent boundary. Young subduction zones near Sulawesi began at edges of ocean basins, not at former spreading centres or transforms, at point of major differences in elevation between ocean floor and adjacent hot, weak and thickened arc/continental crust. Age of the ocean crust appears unimportant. Close relationship with extension marked by dramatic elevation of land, exhumation of deep crust and spectacular subsidence of basins. Etc.)

Hall, R. (2019)- New views of Eastern Indonesia. GeoExpro 16, 1, p. 58-62.
(online at: https://www.geoexpro.com/wp-content/uploads/2022/11/GEO_ExPro_Favourite_Geoscience_Magazine_Oil_Gas_2019_v16_i1.pdf)
(Brief review of history of geological understanding of Eastern Indonesia. Most fragmentation during Neogene now understood as result of rapid extension: first to subduction rollback into Banda Embayment, which continues today, and younger rollback-related extension related to subduction of Celebes Sea at N Sulawesi trench. Extreme extension exhumed middle and lower crust in core complexes. Rocks from base of the crust and sub-continental lithospheric mantle found in strike-slip fault zones)

Hall, R. (2019)- Plate tectonic reconstructions of SE Asia: Bacon, salami or baloney? Proc. 2019 South East Asia Petroleum Exploration Society (SEAPEX) Conference, Singapore, 2019, 1p. *(Abstract only)*

Hall, R., J. Ali, C. Anderson & G.J. Nichols (1992)- Dispersion and accretion recorded in Eastern Indonesia. Proc. First International Symposium Gondwana dispersion and Asian accretion, China 1991, IGCP Project 321, p. 133-138.

Hall, R., B. Clements & H.R. Smyth (2009)- Sundaland: basement character, structure and plate tectonic development. Proc. 33rd Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, IPA09-G-134, p. 1-26.

(online at: https://www.researchgate.net/publication/268358722_Sundaland_Basement_character_structure_and_plate_tectonic_development)
(New plate reconstructions going back to 150 Ma, showing Borneo terranes separating from Australian NW shelf in Late Jurassic and colliding with Asia in Early Cretaceous)

Hall, R. & J.D. Holloway (eds.) (1998)- Biogeography and geological evolution of SE Asia. Backhuys Publishers, Leiden, p. 1-410.
(Collection of papers from 1996 conference on SE Asia tectonics and biogeography. Some papers available online at: http://searg.rhul.ac.uk/publications/papers/pdf_publications/..)

Hall, R. & C.K. Morley (2004)- Sundaland Basins. In: P. Clift, P. Wang et al. (eds.) Continent-ocean interactions within the East Asian marginal seas, American Geophysical Union (AGU), Geophysical Monograph 149, p. 55-85.
(online at: https://www.researchgate.net/publication/258699653_Sundaland_Basins)
(Continental core of Sundaland, comprising Sumatra, Java, Borneo, Thai-Malay Peninsula and Indochina, was assembled during Triassic Indosinian orogeny. Region includes extensive shallow seas, is not significantly elevated, but not stable for long time. Today surrounded by subduction and collision zones. Cenozoic deformation recorded in numerous deep sedimentary basins along highlands. Sediment fill mostly locally derived. Conventional basin modeling fails to predict heat flow, elevation, basin depths and subsidence history of Sundaland and overestimates stretching factors. Can be explained by interaction of hot upper mantle, weak lower crust, and lower crustal flow in response to changing forces at plate edges)

Hall, R. & I. Sevastjanova (2012)- Australian crust in Indonesia. Australian J. Earth Sciences 59, 6, p. 827-844.
(online at: ttps://www.researchgate.net/publication/254218249_Australian_crust_in_Indonesia)
(Core of SE Asia assembled from continental blocks that separated from Gondwana in Paleozoic and collided with Asian blocks in Triassic. Fragments of Gondwana/Cathaysia blocks rifted and separated from Asia and later re-amalgamated with SE Asian continental core. Mesozoic rifting of fragments from Australian margins followed by Cretaceous collisions. Cenozoic collision of Australia with SE Asian margin added more continental crust. Fragments of Cathaysian/Asian continental crust form parts of NW Borneo and offshore and Australian blocks underlie much of Borneo. W Sulawesi and Java rifted from Australia in Jurassic and arrived in present positions in Cretaceous. Sula Spur collided with SE Asian margin in E Miocene, then fragmented by subduction-driven extension)

Hall, R. & H.R. Smyth (2008)- Cenozoic arc processes in Indonesia: identification of the key influences on the stratigraphic record in active volcanic arcs. In: A.E. Draut et al. (eds.) Formation and applications of the sedimentary record in arc collision zones. Geological Society of America (GSA), Special Paper 436, p. 27-54.
(online at: http://searg.rhul.ac.uk/pubs/hall_smyth_2008%20Indonesia%20arc%20processes.pdf)
(Record of Cenozoic subduction volcanic activity at SE Asia margins. Stratigraphic record in Indonesian region reflects complex tectonic history, including collisions, changing plate boundaries, subduction polarity reversals, elimination of volcanic arcs and extension. Growth of region in episodic way by addition of ophiolites and continental slivers, and as result of arc magmatism)

Hall, R. & W. Spakman (2002)- Subducted slabs beneath the eastern Indonesia-Tonga region: insights from tomography. Earth Planetary Science Letters 201, 2, p. 321-336.
(Tomographic images of mantle structure N and NE of Australia show anomalously fast regions, interpreted in terms of current and former subduction systems)

Hall, R. & W. Spakman (2004)- Mantle structure and tectonic evolution of the region North and East of Australia. In: R.R. Hillis & R.D. Muller (eds.) Evolution and dynamics of the Australian Plate, Geological Society of America (GSA), Special Paper 372, p. 361-381.
(online at: http://searg.rhul.ac.uk/pubs/hall_spakman_2003%20Mantle%20structure-tectonic%20evolution%20N%20and%20E%20of%20Australia.pdf)

(Tomographic images of mantle show high seismic-velocity anomalies, interpreted as subducted slabs. Several generally flat deeper anomalies not related to present subduction. Mainly discussion of potential Tertiary subducted slabs around NE Australia-New Guinea)

Hall, R. & W. Spakman (2005)- Mantle tomography and Southeast Asian tectonics. Indonesian Petroleum Association (IPA) Newsletter, July 2005, p. 31-36.
(online at: www.ipa.or.id/download/news/IPA_Newsletter_07_2005_9.pdf)

Hall, R. & W. Spakman (2015)- Mantle structure and tectonic history of SE Asia. Tectonophysics 658, p. 14-45.
(online at: https://dspace.library.uu.nl/bitstream/1874/329910/1/1_s2.0_S0040195115003698_main.pdf)
(Review of tomography and tectonic interpretations of Greater Indonesian region)

Hall, R. & M.E.J. Wilson (2000)- Neogene sutures in Eastern Indonesia. J. Asian Earth Sciences 18, p. 781-808.
(online at: https://www.academia.edu/31155288/Neogene_sutures_in_eastern_Indonesia)
(Five suture zones: (1) Molucca (Pliocene- Recent Halmahera and Sangihe arcs collision), (2) Sorong, (3) Sulawesi (Late Oligocene- E Miocene West and East Sulawesi continent-continent collision), (4) Banda (Banda Volcanic arc and N Australia collision) and (5) Borneo sutures (E-M Miocene S China- N Borneo collision), each with relatively short history)

Hamilton, W. (1970)- Tectonic map of the Indonesian region, a progress report. U.S. Geological Survey, Denver, Open File Report 70-150 (1474), p. 1-29.
(online at: https://pubs.usgs.gov/of/1970/0150/report.pdf)
(Progress report on Hamilton's mega-project on the tectonics of Indonesia, at a time when the new theory of plate tectonics was first being applied to the Indonesian region. (Intro quote: "Many Dutch tectonists--Brouwer, Umbgrove, van Bemmelen, Smit Sibinga, Vening Meinesz, Westerveld, and others--recognized that this complex cluster of islands represents an early stage in the evolution of orogenic belts. Not until Indonesia is understood can we comprehend the Alps". Updated in Hamilton's (1978-1979 masterpieces; JTvG)

Hamilton, W. (1973)- Tectonics of the Indonesian Region. In: B.K. Tan (ed.) Proc. Regional Conference on the Geology of SE Asia, Kuala Lumpur 1972, Bull. Geological Society Malaysia 6, p. 3-10.
(online at: www.gsm.org.my/products/702001-101358-PDF.pdf)
(Early paper on plate tectonic interpretation of Indonesia, following assumptions that subduction zones are characterized by ophiolite, melange, wildflysch and blueschist, that intermediate and silicic calc-alkaline igneous rocks form above Benioff zones, and that truncations of orogenic belts indicate rifting. SE Asia and 'Sundaland' are aggregates of small continental fragments. Philippines, Sulawesi and Halmahera consist of Mesozoic? and Cenozoic island-arc subduction and magmatic complexes and lack old continental foundations)

Hamilton, W. (1974)- Map of the sedimentary basins of the Indonesian region. U.S. Geological Survey (USGS), Miscellaneous Investigations Series, Reston, Va., Map I-875-B, 1:5,000,000. *(Map)*
(online at: https://pubs.usgs.gov/publication/i875B)

Hamilton, W. (1974)- Earthquake map of the Indonesian region. U.S. Geological Survey (USGS), Miscellaneous Investigations Series, Map I-875-C, 1:5,000,000.
(online at: http://pubs.usgs.gov/imap/0875c/plate-1.pdf)
(Map showing earthquake epicenters and depth recorded from 1961-1971, with interpreted subduction zones)

Hamilton, W. (1976)- Subduction in the Indonesian region. Proc. 5th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, p. 3-23.
(Early plate tectonic interpretation of Indonesia)

Hamilton, W. (1977)- Subduction in the Indonesian region. In: M.Talwani & W.C. Pitman (eds.) Island arcs, deep sea trenches and back-arc basins, American Geophysical Union (AGU), Maurice Ewing Series 1, p. 15-31.
(As above. Outer-arc ridge between Java-Sumatra and active Java Trench is top of wedge of melange and imbricated rocks whose steep-moderate dips are sharply disharmonic to gently dipping, subducting oceanic

plate beneath. Wedge has grown by scraping off of oceanic sediments and basement against and beneath its toe, and by internal imbrication. Outer-arc basin behind ridge originated from Paleogene continental shelf-and-slope assemblage whose seaward side was raised by melange stuffed beneath it by Neogene subduction. Banda Arc now colliding with Australian-New Guinea continent. Sumba is microcontinental fragment derived from Java Shelf. Philippines are product of aggregation of segments of various island arcs)

Hamilton, W.B. (1978)- Tectonic map of the Indonesian region. U.S. Geological Survey (USGS) Map I-875-D, 1:5,000,000.
(online at: http://pubs.usgs.gov/imap/0875d/plate-1.pdf)
(Reprinted with corrections in 1981. Mainly surface geology with structural elements, not 'terrane map')

Hamilton, W. (1979)- Tectonics of the Indonesian Region. U.S. Geological Survey (USGS) Professional Paper 1078, p. 1-345.
(online at: http://pubs.usgs.gov/pp/1078/report.pdf)
(Classic, first comprehensive overview and synthesis of Indonesia tectonics in context of plate tectonics, of both land and offshore areas. An aging, but unrivaled masterpiece on geology of Indonesia, still with abundant good information, observations and insights. First to interpret Banda Sea as Neogene extensional basin. Etc.)

Hamilton, W. (1988)- Plate tectonics and island arcs. Geological Society of America (GSA) Bull. 100, p. 1503-1527.
(online at: www.researchgate.net/profile/Warren-Hamilton/publication/249526083_Plate_tectonics_an Etc.)
(Extensice discussion of plate tectonics, with many examples from Indonesia. Modern Sunda volcanic arc system, involving subduction of Indian Ocean lithosphere beneath Sumatra and Java, was inaugurated only in middle Tertiary time. Variations in composition of lavas along Sunda-Banda Arc reflects continental crust in Sumatra segment, transitional crust in Java and mature oceanic island arc developing from Bali to Sumbawa. Much of the older geology records subduction in quite different tectonic systems. Sumatra may have rifted from what is now medial New Guinea in M Jurassic time. Java constructed entirely by post-Jurassic subduction-related processes of magmatism and tectonic accretion. Etc.)

Hamilton, W. (1989)- Convergent-plate tectonics viewed from the Indonesian region. In: A.M.C. Sengor (ed.) Tectonic evolution of the Tethyan region, Kluwer Academic Publishers, Dordrecht, p. 655-698.
(Thorough review of plate tectonic elements and processes in zones of convergence, with examples from Indonesian region. Overriding plates generally rel. undeformed. Subduction systems along continental margins typically inaugurated by reversal of subduction after island arc or continental mass collision. High-pressure metamorphism only where crustal material subducted beneath overriding plate. Sunda Arc system changes along strike from continental in Sumatra to transitional in Java to mature oceanic island arc in Bali and Lombok. Sumatra Block separated from New Guinea in mid-Jurassic. Etc.)

Hamilton, W. (1989)- Convergent plate tectonics viewed from the Indonesian region. Geologi Indonesia 12, 1 (IAGI; Prof. Dr. J.A. Katili 60 years Special Volume), p. 35-88.
(Same paper as Hamilton (1989), above)

Hamilton, W.B. (1995)- Subduction systems and magmatism. In: J.L. Smellie (ed.) Volcanism associated with extension at consuming plate margins, Geological Society, London, Special Publ. 81, p. 3-28.
(Subducting oceanic plates not fixed. Hinges roll back into oceanic plates and slabs sink more steeply than inclinations of Benioff zones. Common regime in overriding plates is extensional; leading edges crumpled only in collisions. Shear coupling between subducting slabs and overriding plates limited to shallow depths. Subduction cannot occur simultaneously beneath opposite sides of rigid plate. Inception ages, collisions, polarity reversals and stage of petrological evolution vary greatly along continuous arc systems. Back-arc basins form by spreading behind migrating arcs. Etc.)

Hammond, J.O.S., J. Wookey, S. Kaneshima, H. Inoue, T. Yamashina & P. Harjadi (2010)- Systematic variation in anisotropy beneath the mantle wedge in the Java-Sumatra subduction system from shear-wave

splitting. Physics Earth Planetary Interiors 178, p. 189-201. *(manuscript online at: https://hal.science/hal-00610669/file/PEER_stage2_10.1016%252Fj.pepi.2009.10.003.pdf)*
(Splitting in S-waves from local earthquakes across Sumatra- Java subduction zone between 75- 300km depthp show trench parallel fast directions. Deeper local events shows larger time-lags and significant variation in fast direction. Significant differences between slab subducted beneath Sumatra and older slab beneath Java)

Hamzah, L., N.T. Puspito & F. Imamura (2000)- Tsunami catalog and zones in Indonesia. J. Natural Disaster Science (Kyoto, Japan) 22, 1, p. 25-43.
(online at: https://www.jstage.jst.go.jp/article/jnds/22/1/22_1_25/_pdf/-char/en)
(Documentation of 105 tsunami events in Indonesia between 1600-1999. 90% of events caused by shallow earthquakes at subduction and plate boundaries, ~95 by volcanic eruptions. Six earthquake/ tsunamigenic regions. Tsunami potentials in Banda and Moluccas region rel. high. Etc.)

Hantoro, W.S. (1992)- Etude des terrasses recifales quaternaries soulevees entre le detroit de la Sonde et l'Ie de Timor, Indonesie: mouvements verticaux de la croute terrestre et variations du niveau de la mer. Ph.D Thesis Universite Aix Marseille II, Vol. 1, p. 1-761 and Vol. 2, p. 1-225. *(Unpublished)*
('Study of Quaternary reef terraces between Sunda Strait and Timor island: vertical crustal movements and sea level variations')

Hantoro, W.S., R. Lafont, S. Bieda, L. Handayani, E. Sebowo & S. Hadiwisastra (1996)- Holocene to Recent vertical movement in Indonesia; study on emerged coral reef. Proc. IGCP Symposium Geology SE Asia and adjacent areas, Hanoi 1995, Journal of Geology, Hanoi, B, 7-8, p. 93-113.
(Many Indonesian islands have emerged Holocene coral reef platforms in sheltered beach setting, reflecting mid-Holocene sea level highstand, ~3m above present-day sea level. Vertical movements identified by coral reefs 'outside stepping' (uplift; Banda Arc from Alor to E) or 'inside stepping' (subsidence, e.g. S Sunda Strait))

Harahap, B.H., S. Bachri, Baharuddin, N. Suwarna, H. Panggabean & T.O. Simanjuntak (2003)- Stratigraphic lexicon of Indonesia. Geological Research Development Centre (GRDC), Bandung, Special Publ. 29, p. 1-729.
(should be online at: https://geology.esdm.go.id/lexicon/)
(Comprehensive overview of names, definitions, ages and type localities of 1856 formations used on Geological Survey maps in Indonesia. Many formation names used through Indonesia by other authors, oil industry, etc., not included)

Harder, S.H., R.J. McCabe & M.F.J. Flower (1992)- A single mechanism for Cenozoic extension in and around Indonesia. In: Symposium on Tectonic framework and energy resources of the western margin of the Pacific Basin, Kuala Lumpur 1992, Warta Geologi 18, 6, p. 263. *(Abstract only)*
(online at: https://gsmpubl.wordpress.com/2014/09/17/warta-geologi-1985-1994/)
(SE Asia has large Tertiary basins and major strike-slip faults on and around Indochina Peninsula. Basins in different orientations and intersected by strike-slip faults. Creation mechanism is collision of Indian plate with Eurasian continent and rotating stress regime created by collision. Rotating stress mechanism began in Eocene when Indian plate first contacted Eurasian continent forming Ranong fault in Thailand. As stress field increased and propagated N-ward from collision zone stress field in Indochina rotated. No figures)

Harder, S.H., S.J. Mauri & S. Marshall-Arrazola (1993)- Gravity modelling of extensional basins in Southeast Asia. In: G.H. Teh (ed.) Tectonic framework and energy resources of the western margin of the Pacific Basin, Kuala Lumpur 1992, Bull. Geological Society Malaysia 33, p. 153-162.
(online at: https://gsmpubl.files.wordpress.com/2014/09/ngsm1992006.pdf)
(Comparison of free-air gravity with sediment thickness of SE Asia sedimentary basins shows no correlation due to differences in crustal structure under basins in extensional vs. convergent regimes. Thickened crust in convergent regimes creates negative anomalies)

Hardjawidjaksana, K. & H. Prasetyo (1994)- Review of the development of the eastern Indonesia triple junction. Proc. 30th Session Comm. Co-ord Joint Prospecting Mineral Resources Asian Offshore Areas (CCOP), Bangkok 1993, 2, p. 109-136.

(online at: https://repository.unescap.org/items/177e9366-1a15-4fc9-986f-15520603d2c3)
(Review of structure and tectonic development of Eastern Indonesia. Complex area for which at least seven different tectonic frameworks have been proposed)

Harjono, H. (2017)- Seismotectonics of the Sunda Arc. LIPI Press, Jakarta, p. 1-128.

Harris, R. (2003)- Geodynamic patterns of ophiolites and marginal basins in the Indonesian and New Guinea regions. In: Y. Dilek & P.T. Robinson (eds.) Ophiolites in Earth history, Geological Society, London, Special Publ. 218, p. 481-505.
(online at: http://geology.byu.edu/home/sites/default/files/2003-geodynamic-patterns-opt.pdf)
(Ophiolites in E Indonesia- New Guinea region suggest strong correlation with marginal basin development and closure. Most ophiolite slabs represent fragments of oceanic lithosphere with subduction zone component as indicated by petrochemistry and occurrence of boninite)

Harris, R. & J. Major (2017)- Waves of destruction in the East Indies: the Wichmann catalogue of earthquakes and tsunami in the Indonesian region from 1538 to 1877. In: P. Cummins & I. Meilano (eds.) Geohazards in Indonesia: Earth science for disaster risk reduction, Geol. Soc, London, Special Publ. 441, p. 9-46.
(online at: http://geology.byu.edu/Home/sites/default/files/2016_harris_and_major_eq_catalog_small.pdf)
(Two volumes of Arthur Wichmann's 'Die Erdbeben des Indischen Archipels' (1918 and 1922) document 61 regional earthquakes and 36 tsunamis between 1538 and 1877 in Indonesian region)

Harrold, T.W.D., R.E. Swarbrick & N. Goulty (1999)- Pore pressure estimation from mudrock porosities in Tertiary basins, Southeast Asia. American Assoc. Petrol Geol. (AAPG) Bull. 83, 7, p. 1057-1067.

Harsono, D. (2022)- Kekayaan alam Indonesia: lempeng tektonik. Badan Geologi, CV Cakrawala Satria Mandiri, Kediri, p. 1-106.
('Indonesia's natural resources: Tectonic plates'. Popular booklet on tectonics of Indonesia))

Hartono, M.H.S. (1970)- Steps towards standardization of stratigraphic classification in Indonesia. In: Stratigraphic correlation between sedimentary basins of the ECAFE region (Second Volume), United Nations ECAFE Mineral Resources Development Ser. 36, p. 130-134.
(Many lithostratigraphic names used in Indonesia may be considered as informal because they do not meet requirements of stratigraphic rules or were never formally proposed. Recommends Geological Survey must take immediate steps towards standardization of stratigraphic nomenclature in Indonesia (!))

Hartono, M.H.S. (1979)- Geological mapping in Indonesia: the state of the art. Bull. Geological Research Development Centre (GRDC) 1, p. 1-6.

Hartono, H.M.S. (1990)- Late Cenozoic tectonic development of the Southeast Asian continental margin in the Banda Sea area. Tectonophysics 181, p. 267-276.
(Assumes Banda Sea underlain by old oceanic crust, compatible with low heat flow, and allochthonous units on Timor are of Australian origin. Data from N Banda microcontinents, dredged samples from Banda/ Lucipara ridges, etc., support interpretation of microcontinents translated left-laterally westward from Irian Jaya)

Hartono, H.M.S. (1990)- Origin and emplacement of allochthonous terranes in the Banda outer arc. Bull. Marine Geological Institute, Indonesia 5, 1, p. 23-33.
(Common tectonostratigraphic terranes in Banda Sea area, displaced from Australian continental crust. South Banda 'allochthonous' terranes like Maubisse, Lolotoi, etc.of Timor, rifted from NW Australian margin in Jurassic. Cretaceous Lasipu Fm 'flysch' of Sumba correlated with allochthonous terranes of Timor. Banda Sea oceanic crust originated in Eastern Indian Ocean. North Banda microcontinents originated from N Irian Jaya, displaced by transcurrent faulting along Sorong FZ (= Silver et al. 1985 model). Etc.)

Hartono, H.M.S. (co-ord.), C.S. Hutchison, S. Tjokrosapoetro & B. Dwiyanto (1991)- Studies in East Asian tectonics and resources (SEATAR). Crustal transect IV: Banda Sea. CCOP, Bangkok, p. 1-30.

(Overview of SEATAR Banda Sea crustal Transect. Banda Sea underlain by oceanic crust, believed to be of Cretaceous age. Oldest Banda Sea volcanics 12 Ma)

Hartono, H.M.S. & S. Tjokrosapoetro (1984)- Preliminary account and reconstruction of Indonesian terranes. Proc. 13th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, p. 185-226.
(Indonesian Archipelago 13 terranes (accretionary terranes excluded). Proto-Kalimantan and Sumatra basement include island arcs and amalgamated in Late Triassic along Bentong-Raub suture to form Sunda Platform. In Paleogene SW Sulawesi rifted from E Kalimantan to collide with oceanic crust to E. In Tertiary W Sulawesi magmatic arc came into existence. Sulawesi Ophiolite from oceanic crust pushed W by Banggai-Sula terrane and blocked by Tertiary W Sulawesi arc. Sumba, Buton, Seram and Timor terranes result of rift-drift from NW Australia in Jurassic. Banggai-Sula, Bacan and Buru terranes formed by Sorong Fault slicing off NW Irian Jaya and moving W. NW Australia /Irian Jaya passive margin, moving N behind front of oceanic crust. It collided with N Irian Jaya island Arc in Oligocene, after which polarity of subduction changed to S)

Hartono, H.M.S. & S. Tjokrosapoetro (1985)- Preliminary account and reconstruction of Indonesian terranes. Proc. 20th Session Committee Co-ord. Joint Prospecting Mineral Resources in Asian Offshore Areas (CCOP), Kuala Lumpur 1983, 2, Technical Reports, p. 257-261.
(online at: https://repository.unescap.org/items/904fe6cc-d317-490d-8289-296e15f5d015(
(Same paper as Hartono & Tjokrosapoetro (1984); above)

Hartono, H.M.S. & S. Tjokrosapoetro (1986)- Geological evolution of the Indonesia Archipelago. In: G.H. Teh & S. Paramananthan (eds.) Proc. 5th Regional Congress Geology, Mineral and Energy Resources SE Asia SE Asia (GEOSEA V), Kuala Lumpur 1984, 2, Bull. Geological Society Malaysia 20, p. 97-136.
(online at: http://www.gsm.org.my/products/702001-101431-PDF.pdf)
(Same paper as Hartono & Tjokrosapoetro (1984, 195) above)

Hatherton, T. & W.R. Dickinson (1969)- The relationship between andesitic volcanism and seismicity in Indonesia, the Lesser Antilles and other island arcs. J. of Geophysical Research 74, 22, p. 5301-5310.
(On relationship between K-content of andesitic volcanoes and depth of seismic (Benioff) zone below volcano. One of first 'new plate tectonics' concepts applied to Indonesia)

Hayes, D.E. (ed.) (1978)- A geophysical Atlas of the East and Southeast Asian seas. Geological Society of America (GSA), MC-25, p.

Hayes, D.E. (ed.) (1980)- The tectonic and geologic evolution of Southeast Asian seas and islands. American Geophysical Union (AGU), Geophysical Monograph 23, p. 1-326.
(Reports of SEATAR project work)

Hayes, D.E. (ed.) (1983)- The tectonic and geologic evolution of Southeast Asian seas and islands- Part 2. American Geophysical Union (AGU) Geophysical Monograph 27, p. 1-396.
(Reports of SEATAR project work -part 2)

Hayes, D.E. (1984)- Marginal seas of Southeast Asia- their geophysical characteristics and structure. In: Origin and history of marginal and inland seas. Proc. 27th International Geological Congress, Moscow 1984, VNU Science Press, 23, p. 123-154.
(Identification and dating of magnetic lineaments in oceanic crust below marginal basins if SE Asia relatively difficult and associated with uncertainties, because small basin sizes and limited age range of ocean floor makes it difficult to identify a unique sequential pattern. Also, basins formed in low geomagnetic latitudes, where magnetic lineations tend to have low amplitudes and more difficult to map)

Hedervari, P. & Z. Papp (1981)- Seismicity maps of the Indonesian region. Tectonophysics 76, p. 131-148.
(Rel. dated, general earthquakes distribution maps)

Hehuwat, F. (1976)- Isotopic age determinations in Indonesia: the state of the art. Proc.CCOP Seminar on Isotopic dating, Bangkok 1975, United Nations ESCAP CCOP, p. 135-157.

Hehuwat, F.H.A. (1986)- An overview of some Indonesian melange complexes- a contribution to the geology of melange. Memoir of the Geological Society of China (Taiwan) 7, p. 283-300.

Hehuwat, F.H.A. (1987)- Suatu tinjauan deformasi Kuarter di Indonesia. In: Geologi Kuarter dan lingkungan hidup, Geological Research Development Centre (GRDC), Bandung, Special Publ. 7, p. 42-50.
('A review of Quaternary deformation in Indonesia'. In: Quaternary Geology and environment)

Heine, C., L. Quevedo, H. McKay & R.D. Muller (2012)- Plate tectonic consequences of competing models for the origin and history of the Banda Sea subducted oceanic lithosphere. Eastern Australian Basins Symposium (EABS) IV, Brisbane 2012, Petroleum Exploration Society Australia (PESA), p. 25-34.
(online at: https://arxiv.org/ftp/arxiv/papers/1210/1210.4958.pdf)
(Banda Arc subduction system shows bowl-shaped geometry in seismic tomographic images, indicating Argo-Tanimbar-Seram oceanic lithosphere still attached to surrounding continental margins of N Australia and Birds Head microcontinent. Slab unfolding model suggests Birds Head block rotated 20-35° CW relative to present-day position. Birds Head block is autochthonous to W Irian Jaya, with W margin continental transform margin during rifting and opening of ATS ocean)

Heliani, L.S., Y. Fukuda & S. Takemoto (2004)- Simulation of the Indonesian land gravity data using a digital terrain model data. Earth Planets and Space 56, 1, TERRAPUB, Tokyo, p. 15-24.
(online at: https://www.terrapub.co.jp/journals/EPS/pdf/2004/5601/56010015.pdf)
(Indonesian gravity field neither accurately nor comprehensively determined, especially land data. This study proposes solution to data unavailability by means of simulation technique)

Heryandoko, N., A.D. Nugraha, Z. Zulfakriza, S. Rosalia, T. Yudistira, S. Rohadi, D. Daryono, P. Supendi, N. Nurpujiono, F. Yusuf.et al. (2024)- Crustal structure of Borneo, Makassar Strait and Sulawesi from ambient noise tomography. Geophysical J. International 237, 2, p. 949-964.
(online at: https://academic.oup.com/gji/article/237/2/949/7623031)
(Rayleigh waves tomography models from ambient noise from 108 seismic stations over 8 months. Models illuminate strong low shear wave velocity (Vs) anomaly at shallow depth (≤ 14 km) and strong high Vs anomaly at depths of 20-30 km beneath N Makassar Strait. Broad and deep sedimentary basement at ~14 ± 2 km depth beneath (Kutai Basin-) N Makassar Strait is floored by shallow Moho at ~22 ± 2 km depth (thinnest crust in study area). Moho depth beneath C Sulawesi ~45 km (thickest crust in study area), suggesting crustal thickening since late Oligocene. High near-surface Vs anomalies in SW Borneo close to Schwaner Mountains confirm existence of crustal root beneath this region (oddly, no location map of regional transects? JTvG))

Hetzel, W.H. & W.C.B. Koolhoven (1932)- Eenige aanteekeningen over de stratigrafie en de tektoniek van het Oost-lndische Tertiair. De Mijningenieur 13, p. 179-191.
('Some notes on the stratigraphy and tectonics of the East Indies Tertiary')

Hinschberger, F. (2000)- Geodynamique de l'Est Indonesien dans son cadre cinematique. Doct. Thesis Universite de Bretagne Occidentale, Brest, p. 1-325.
(online at: https://www.researchgate.net/publication/330620358_Geodynamique_de_l'Est_Indonesien_dans_son_cadre_cinematique)
('Geodynamics of Eastern Indonesia in its kinematic framework'. Basins and microcontinents of Banda Sea region. N Banda Sea backarc basin opened between 12.5 and 7 Ma, S Banda Sea between 6.5- 3.5 Ma. Banda Ridges that separate N and S Banda basins derived from single continental block. Weber Basin deepest basin in region (7400m); migrated to NE in Late Pliocene- Pleistocene. With plate reconstructions of last 15 Myrs)

Hinschberger, F., J.A. Malod, J.P. Rehault, M. Villeneuve, J.Y. Royer & S. Burhanuddin (2005)- Late Cenozoic geodynamic evolution of eastern Indonesia. Tectonophysics 404, 1-2, p. 91-118.
(online at: https://www.academia.edu/9537123/Late_Cenozoic_geodynamic_evolution_of_eastern_Indonesia)

(E Indonesia M Miocene- Recent plate reconstruction model, involving Late Miocene- Pliocene opening of Banda Sea)

Hirayama, J. (ed.) (1991)- Total sedimentary isopach maps offshore East Asia, with basin descriptions. CCOP, Technical Bulletin 23, p. 1-114.

Hochstein, M.P. & J. Moore (eds.) (2008)- Indonesia: geothermal prospects and developments. Geothermics. 37, 3, p. 217-365.
(Collection of six papers on geothermal prospects in Indonesia. Less than a third of >200 inferred high-temperature prospects investigated during past 35 years, 20 of which were tested by deep exploration drilling)

Hochstein, M.P. & & S. Sudarman (2015)- Indonesian volcanic geothermal systems. Proc. World Geothermal Congress 2015, Melbourne, p. 1-11.
(online at: https://www.researchgate.net/publication/297709385_Indonesian_Volcanic_Geothermal_Systems)
(Two groups of Indonesian volcanic geothermal systems:(1)larger group hosted by young strato-volcanoes, (2) smaller group includes steeply dipping 'volcanic feeder (plug-type) systems' hosted by convective systems standing in moderate terrain. Etc.)

Hoffman, N. (2002)- Australian geology in Indonesia: new frontiers and new discoveries. Proc. 28th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, p. 289-300.
(Discussion of Australian Mesozoic geology in Timor sea area. Reservoirs predominantly Jurassic, with recent Laminaria and Sunrise/Troubadour gas discoveries close to Indonesian border. First significant Indonesian Mesozoic hydrocarbon discovery in Tangguh, Irian Jaya, with Jurassic source-reservoir similar to Plover Fm)

Hoffmann-Rothe, J. (1994)- Indonesien/Indonesia. In: H. Kulke (ed.) Regional petroleum geology of the world, I, Borntraeger, Berlin, p. 747-794.
(Literature review of oil-gas basins and fields of Indonesia; in German)

Holcombe, C.J. (1977)- Earthquake foci distribution in the Sunda Arc and the rotation of the back-arc area. Tectonophysics 43, 3-4, p. 169-180.
(Earthquake foci suggest Indian Ocean plate underthrust only 200 km under C Sumatra, but >600 km under Java Sea. May be due to oblique India-Eurasia convergence caused by rotation of Sunda backarc area relative to Eurasia. Backarc rotation also explains pattern of Cenozoic volcanicity in Sumatra, and nature of Andaman Basin, which may be rhombochasm forming behind locally divergent plate margin)

Holcombe, C.J. (1977)- How rigid are lithospheric plates? Folds and shear rotation in Southeast Asia. J. Geological Society, London, 134, 3, p. 325-342.
(Significant fault movement during Tertiary in continental SE Asia, part of Eurasia plate. Three separate but linked rotations (1) Indochina subplates wrench rotation, (2) Sunda shear rotation, and (3) rotation of Malay Peninsula and Sunda Platform by movements along Ranong and Semangko faults. Pre-Oligocene map reconstruction of SE Asia offers explanations for patterns of Quaternary faulting and Tertiary sedimentation)

Holloway, J.D. & R. Hall (1998)- SE Asian geology and biogeography: an introduction. In: R. Hall & J.D. Holloway (eds.) Biogeography and geological evolution of SE Asia, Backhuys Publishers, Leiden, p. 1-23.

Honda, H. & H. Nagura (2000)- A note on the Tertiary history of Indo-Australian plate-movements and the West Indonesian Tertiary stratigraphy. J. Japanese Association for Petroleum Technology 65, 3, p. 270-277.
(in Japanese, with English Abstract)
(online at: https://www.jstage.jst.go.jp/article/japt1933/65/3/65_3_270/_article/-char/en)
(Two geohistorical phases in Indo-Australian plate movements: (1) slow N-ward movement of Australian plate until latest Eocene with sudden acceleration around earliest Oligocene; (2) Late Oligocene acceleration and plateau of high movement rate until late Early Miocene, and early M Miocene acceleration. These plate movements well recorded in Indonesian Tertiary and Quaternary systems)

Huang, C.Y., P.B. Yuan, W.L. Ching, T.K. Wang & P.C. Chung (2000)- Geodynamic processes of Taiwan arc-continent collision and comparisons with analogs in Timor, Papua New Guinea, Urals and Corsica. Tectonophysics 325, p. 1-21.
(Comparison of arc-continent collisions in four areas: Timor (initial stage), Taiwan, Papua New Guinea and Corsica (most advanced stages))

Husson, L., N. Riel, S. Aribowo, C. Authemayou, G. de Gelder, B.J.P. Kaus, C. Mallard, D.H. Natawidjaja, K. Pedoja & A.C. Sarr (2022)- Slow geodynamics and fast morphotectonics in the Far East Tethys. Geochem. Geophysics Geosystems 23, 1, e2021GC010167, p. 1-17.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2021GC010167)
(Investigation of relationships between sluggish, long-wavelength mantle convection and often dramatic morphotectonic activity around Java-Banda subduction zone. Links between mantle convection and surface tectonics remain challenging to disentangle. In Far-East Tethys, arcuate Banda subduction zone circumscribes deepest oceanic basin on Earth, seismotectonic activity slices upper plate and vast expanses of Sundaland and N Australia (Sahul) continents are flooded (and subsiding). Many physiographic changes triggered by docking of Australian continent onto subduction zone, while mantle flow remains slow and long-wavelength at depth)

Hutabarat, S. (1993)- Khuluk dan ploa umum diagenesis mineral-mineral lempung dalam batuan waduk klastik di Cekungan-Cekungan Indonesia-Barat. Proc. 22nd Annual Conv. Indonesian Association Geologists (IAGI), Bandung, 2, p. 1015-1027.
(online at: https://www.iagi.or.id/web/digital/53/22nd-Volume-2-(6-9-Des-1993)-413-425.pdf)
("General characteristics and patterns of diagenesis of clay minerals in clastic reservoir rocks in the West Indonesian Basins')

Hutasoit, L.M. & A.M. Ramdhan (2014)- Similarities of overpressuring in some of Western Indonesia's sedimentary basins. Proc. 38th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, IPA14-G-356, p. 1-10.
(In W Indonesia basins top of overpressure is mostly located near top of sag phase deposits. Top of 'hard' overpressure in several areas at onset of smectite-illite transformation.Almost all carbonate build-ups located below sag deposits low overpressure to normal hydrostatic pressure regime)

Hutchings, S.J. & W.D. Mooney (2021)- The seismicity of Indonesia and tectonic implications. Geochem. Geophysics Geosystems 22, e2021GC009812, p. 1-42.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2021GC009812)
(Synthesis of Indonesian seismotectonics, documenting distributions of hypocenters (≥M 4.6) and focal mechanisms (≥M 5.0) over ~20 years, quantifying seismicity rates and comparing seismicity with tectonic and tomography models. Seismicity extends to max. depth of 678 km. Oblique convergence, lithospheric age, mantle temperatures, and plate velocity contribute to non-uniform distribution of intermediate and deep earthquakes)

Hutchison, C.S. (1973)- Tectonic evolution of Sundaland; a Phanerozoic synthesis. In: B.K. Tan (ed.) Proc. Regional Conference on the Geology of SE Asia, Kuala Lumpur 1972, Bull. Geological Society Malaysia 6, p. 61-86.
(online at: www.gsm.org.my/products/702001-101353-PDF.pdf)
(Early paper on tectonic evolution of Sundaland in terms of plate tectonic model. Interesting paleo-tectonic maps of Sundaland since Permian. Infers W Borneo has been part of 'continental' Sundaland since Permian, with opposing subduction systems under Sundaland for Permian- Cretaceous)

Hutchison, C.S. (1975)- Ophiolite in Southeast Asia. Geological Society of America (GSA) Bull. 86, p. 797-806.
(Twenty belts of ultramafic assemblages identified in SE Asia (not including E Indonesia), but fewer than half can be classified as ophiolite. Complete ophiolite sequences only in NE Borneo and Philippine Islands; others incomplete or dismembered)

Hutchison, C.S. (1978)- Southeast Asian tin granitoids of contrasted tectonic setting. J. Physics of the Earth, Tokyo, 26, Suppl., p. 221-232.
(online at: https://www.jstage.jst.go.jp/article/jpe1952/26/Supplement/26_Supplement_S221/_pdf)
(Three major tin granitoid belts in SE Asia: (1) West (Phuket to Tenasserim). Tin associated with Cretaceous adamellite, granite and pegmatite; (2) Main Range (Bangka to S Thailand). Tin associated with Late Carboniferous and Late Triassic granite; (3) East (Billiton to Pahang-Trengganu). Tin-tungsten associated with Permian- M Triassic adamellite-granite)

Hutchison, C.S. (1980)- Southeast Asia. In: A.E. Nairn & F.G. Stehli (eds.) The Indian Ocean, The ocean basins and margins 6, Plenum Press, New York, p. 451-512.
(Substantial overview of Precambrian- Recent rocks distribution from Burma to W Indonesia)

Hutchison, C.S. (1983)- Multiple Mesozoic Sn-W-Sb granitoids of Southeast Asia. In: J.A. Roddick (ed.) Circum-Pacific Plutonic terranes, Geological Society of America (GSA) Memoir 159, p. 35-60.
(SE Asia complex array of granitoid belts, mainly of Mesozoic age. Eastern belt (E Malay Peninsula, Bangka and Billiton(?) is Andean-type Permian- Late Triassic calc-alkaline volcano-plutonic arc (peak ages ~222 Ma and 250 Ma). Probably underlain by continental basement (isoclinally folded Carbo-Permian metasediments, Permian limestones, Namurian shales and sandstones). Abundant volcanic and plutonic activity through Permian and ending active history in Late Triassic with subaerial ignimbritic flows. Narrow central belt of Permian-Triassic granitoids and metamorphic complexes with local Cretaceous granites. Main Range E margin is serpentine-marked Bentong-Raub suture zone. Main Range batholith Sn-granite mainly Late Triassic (~230 and 200 Ma), but with E Permian (~280 Ma) granites; grades W-ward through Penang, Langkawi, and peninsular Thailand to higher level plutons. N Thailand granites mainly Triassic. Main Range and N Thai granites no volcanic associations, and tied to collision and closure of central marginal basin in Late Triassic. Triassic granites and some Cretaceous granites associated with tin, tungsten and antimony deposits, thought to be recycled from continental infrastructure of Sundaland)

Hutchison, C.S. (1984)- Is there a satisfactory classification for Southeast Asian Tertiary basins. Proc. 5th South East Asia Offshore Conf., SE Asia Petroleum Exploration Society (SEAPEX), Singapore 1984, p. 6.64- 6.76.
(SE Asia Tertiary basins classification complicated by presence of microcontinents, originating from Jurassic-E Miocene rifting from S China and N Australian continental margins)

Hutchison, C.S. (1986)- Tertiary basins of S.E. Asia- their disparate tectonic origins and eustatic stratigraphical similarities. In: G.H. Teh & S. Paramananthan (eds.) Proc. 5th Regional Congress Geology Mineral Energy Resources of SE Asia (GEOSEA V), Kuala Lumpur 1984, 1, Bull. Geological Society Malaysia 19, p. 109-122.
(online at: https://gsmpubl.files.wordpress.com/2014/09/bgsm1986010.pdf)
(72 Tertiary basins in greater SE Asia developed by extensional tectonics, combined with wrench control. With exception of marginal seas, sedimentation kept pace with subsidence. Basin unconformities, transgressions, regressions good correspondence to global sea level changes, but may be artifact of overdependence on SE Asian basins for compilation of eustatic curves)

Hutchison, C.S. (1986)- Formation of marginal seas in Southeast Asia by rifting of the Chinese and Australian continental margins and implications for the Borneo region. In: G.H. Teh & S. Paramananthan (eds.) Proc. 5th Regional Congress Geology Mineral Energy Resources of SE Asia (GEOSEA V), Kuala Lumpur 1984, 2, Bull. Geological Society Malaysia 20, p. 201-220.
(With exception of Okinawa and Ayu Troughs, all SE Asia marginal seas formed by processes other than backarc rifting. Andaman Sea is leaky transform system. W Philippine Sea, Banda Sea, Celebes Sea and Sulu Sea basins all remnants of former oceans now trapped behind younger arc-trench systems. S China Sea formed by post-Early Cretaceous rifting of continental margin of SE China. (NB: all these basins are probably younger than assumed by Hutchison, so some conclusions here are not valid; JTvG)

Hutchison, C.S. (1987)- Displaced terranes of the southwest Pacific. In: Z. Ben Avraham (ed.) The evolution of the Pacific Ocean margins, Oxford Monographs Geology Geophysics 8, Oxford University Press, p. 161-175.

Hutchison, C.S. (1987)- Tectonic settings of tin-tungsten granites in Southeast Asia. In: C.S. Hutchison (ed.) Proc. IGCP Project 220 Conference, Technical Bull. 6, Ipoh, Malaysia, SEATRAD Centre, p. 1-24.

Hutchison, C.S. (1989)- The Palaeo-Tethyan realm and Indosinian orogenic system of Southeast Asia. In: A.M.C. Sengor (ed.) Tectonic evolution of the Tethyan Regions, Kluwer, Dordrecht, p. 585-644.
(Extensive review with Paleozoic- Mesozoic reconstructions of SE Asia. SE Asia is composite of Precambrian continental blocks, overlain in part by Paleozoic carbonate-dominated platforms. Major suture in Song Ma, N Vietnam, welded Indosinia and S China blocks in E Carboniferous to form E Asian Continent together with N China Block. E Asian Continent in equatorial latitudes in Permian and developed Cathaysian Gigantopteris flora. W Borneo Basement is detached part of E Asian continent. Paleo-Tethys suture/ Indosinian orogenic system extends S from Dien Bien Phu through Thailand into Peninsular Malaysia (Raub-Bentong). All terrains E of suture have Cathaysian affinities, those to W have Permian Gondwana affinities. Suture closed in Late Triassic. Most Jurassic-Cretaceous age formations are in continental molasse facies. S Sumatra contains Cathaysian flora at Djambi, but N Sumatra strong affinities with Gondwana part of Malay Peninsula. An Indosinian suture may separate the two, but not well defined)

Hutchison, C.S. (1989)- Geological evolution of South-East Asia. Oxford Monographs Geology Geophysics 13, p. 1-368.
(Comprehensive textbook of SE Asia geology. See also 2007 second edition)

Hutchison, C.S. (1992)- The Eocene unconformity on Southeast and East Sundaland. Bull. Geological Society Malaysia 32, p. 69-88.
(online at: https://gsm.org.my/wp-content/uploads/gsm_file_2/702001-101038-PDF.pdf)
(Early Paleogene Sundaland landmass extended as far SE as W Sulawesi. Cratonic nature of Malay Peninsula and China did not extend into or beyond Borneo region of Sundaland, where pre-Eocene outcrops are dominated by Cretaceous rocks. Deep water sediments, melange and ophiolite terrains characteristic of non-cratonic SE peninsula of Sundaland. India collided with Eurasia by 45 Ma (anomaly 1), spreading ceased at NW Wharton Basin, etc. Push of India resulted in clockwise rotation of Sundaland. Regional event causing major Eocene unconformity on and around Sundaland)

Hutchison, C.S. (1994)- Gondwana and Cathaysian blocks, Palaeotethys sutures and Cenozoic tectonics in South-East Asia. Geologische Rundschau 82, 2, p. 388-405.
(Triassic 'Indosinian Orogeny' suturing of Gondwanan and Cathaysian blocks closed Paleotethys Ocean. W Malaysia Sinoburmalaya block has Carboniferous-Permian mudstones with glacial dropstones and is traced into Sumatra. Cathaysian E Malaya block Late Permian Gigantopteris flora and fusulinid limestones with andesitic volcanism, similar to W Sumatra block (also E Permian volcanism, fusulinid limestones and early Cathaysian Jambi flora). S-SSE trending central Peninsular Malaysian Triassic orogenic belt swings SE from Singapore to Bangka, then E to Billiton. Paleo-Tethys suture (Bentong-Raub Line) unlikely to continue S along Paleogene Bengkalis Graben, which transects NW-SE orogenic fabric of Sumatra. Oroclinal bending of Indosinian Orogen, from NW-SE in Sumatra to Peninsular Malaysia, attributed to Paleocene collision of India and indentation into Eurasia. Bending accomplished by clockwise rotation and right-lateral shear parallel to orogenic grain. Mesozoic Paleotethyan sutures transformed into Paleocene and younger shear zones)

Hutchison, C.S. (1996)- South-East Asian oil, gas, coal and mineral deposits. Oxford Monographs Geology Geophysics 36, p. 1-265.
(Major review of SE Asia oil-gas, coal and mineral deposits)

Hutchison, C.S. (1998)- The quest for an understanding of Southeast Asian Cenozoic tectonics and the importance of pre Tertiary structures. Proc. Offshore South East Asia Conference (OSEA98), Singapore, SE Asia Petroleum Exploration Society (SEAPEX), p. 73-74. *(Extended Abstract)*
(N-wards movement of Indian-Australian plate caused (1) cratonic India to begin its collision with continental Eurasia in Eocene, causing CW bending of pre-Tertiary fabric of Sundaland, predominantly by right-lateral wrench faulting, and (2) cratonic Australia to begin collision with Indonesian island arcs in Miocene, causing CCW bending, accomplished by left-lateral faulting (e.g. Sorong Fault). Fracture systems displaced micro-

continents SE-ward from Sundaland and W-ward from Australia- New Guinea. N-S Indosinian fabric of Peninsular Malaysia bends East through Bangka and Billiton. Triassic correlation of NW Borneo possibly with E Vietnam. Most but not all Cenozoic structures follow pre-Tertiary fabric. Etc.)

Hutchison, C.S. (2007)- Geological evolution of South-East Asia, 2nd edition. Geological Society of Malaysia, Kuala Lumpur, p. 1-433.
(selections online at: https://gsm.org.my/wp-content/uploads/gsm_file_2/702001-101656-PDF.pdf)
(Second edition of 1989 textbook of SE Asia geology; with relatively minor revisions)

Hutchison, C.S. (2014)- Tectonic evolution of Southeast Asia. Bull. Geological Society Malaysia 60 (C.S. Hutchison Memorial Issue), p. 1-18.
(online at: https://gsmpubl.files.wordpress.com/2015/04/bgsm2014001.pdf)
(Brief review of SE Asia tectonic history, mainly of Sundaland area (Malay Peninsula- Thailand- Sumatra). Key events Late Triassic collision Sibumasu and E Malaya/Indochina after Permian E-ward subduction beneath E Malaya and development of E-M Triassic Semanggol-Mutus basin foredeep. M-Late Triassic tin granites of Peninsular Malaysia continue in curve through Bangka and Billiton. Late Cretaceous- Paleocene belts of migmatites and plutons. Oroclinal bending of N Sundaland from E-W fabric in Billiton- Borneo to N-S in N Peninsular Malaysia, resulted from indentation of India. Much of Borneo rotated ~50° CCW between 30-10 Ma and ~40° between 80-30 Ma, caused by collision between Australian plate and Indonesian arc at Timor)

Hutchison, C.S. (ed.) R. Sukamto, H.Z. Abidin, T.C., Amin, M.S. Andi et al. (1991)- Studies in East Asian tectonics and resources (SEATAR) Crustal transect VII: Jawa- Kalimantan- Sarawak- South China Sea. CCOP, Bangkok, CCOP/TP 26, p. 1-66.

Hutchison, C.S. (ed.), R. Sukamto, A.P. Madrid et al. (1995)- Studies in East Asian tectonics and resources (SEATAR), Crustal transect VIII, South China- Sulu- Sulawesi- Maluku- Philippine Seas. Geological Research Development Centre (GRDC), Bandung, Special Publ. 20, p. 1-45.
(Review of geology and geophysics along regional transect including Sulu Sea, Celebes Sea, Molucca Sea, Philippine Sea)

Irsyam, M., M. Asrurifak, Hendriyawan, B. Budiono, W. Triyoso & A. Firmanti (2010)- Development of spectral hazard maps for a proposed revision of the Indonesian seismic building code. Geomechanics and Geoengineering 5, 1, p. 35-47.
(Good review of present-day earthquake distribution and tectonic belts of Indonesian region)

Irsyam, M., P.R. Cummins, M. Asrurifak, L. Faizal, D.H. Natawidjaja, S. Widiyantoro, I. Meilano, W. Triyoso et al. (2020)- Development of the 2017 national seismic hazard maps of Indonesia. Earthquake Spectra 36, Suppl. 1, p. 112-136.

Irsyam, M., Hendriyawan, M. Asrurifak, M. Ridwan, F. Aldiamar, I.W. Sengara, S. Widiyantoro et al. (2013)- Past earthquakes in Indonesia and new seismic hazard maps for earthquake design of buildings and infrastructures. In: J. Chu et al. (eds.) Geotechnical predictions and practice in dealing with geohazards, Chapter 3, Springer, p. 33-46.

Jablonski, D. (2007)- Insights into S.E. Asian plate reconstructions as guided by the 2005-2006 regional seismic surveys, Central-Eastern Indonesia. Presentation SEAPEX Conference, Singapore 2007, Abstract, 2p.
(>10 km of Eocene- Recent sediment in Gorontalo Basin which is underlain by pre-rift section of sedimentary origin. Pre-break-up section evidence of older collision that may be related to collision of Mangkalihat-NW Sulawesi microplate with NE Sulawesi. Integration of this observation with onshore geology of SE Sulawesi indicates likely Late Cretaceous collision. Eocene- Miocene in Gorontalo Basin mainly extensional tectonics with late compression estimated approximately at 5.5 Ma)

Jacques, J.M. (2007)- Geotectonic map of SE Asia- basins and hydrocarbon occurrences. Presentation SEAPEX 2007 Conference, Singapore, p.

(GIS-based digital tectonic elements map and sediment thickness map of SE Asia. Map available from SEAPEX)

Jacobson, R.S., G.G. Shor, R.M. Kieckhefer & G.M. Purdy (1981)- Seismic refraction and reflection studies in the Timor-Tanimbar-Aru Trough system and Australian continental shelf. In: A.J. Barber & S. Wiryosujono (eds.) The geology and tectonics of Eastern Indonesia, Proc. CCOP-IOC SEATAR Working Group Meeting, Bandung 1979, Geological Research Development Centre (GRDC), Bandung, Special Publ. 2, p. 153-169.
(Timor-Aru Trough is not deeper than 3.6 km and is extension of Java Trench. Underlain by continental crust. Data strongly support trough is surface trace of subduction zone)

Jarrard, R.D. & S. Sasajima (1980)- Paleomagnetic synthesis for Southeast Asia: constraints on plate motions. In: D.E. Hayes (ed.) The tectonic and geologic evolution of Southeast Asian seas and islands-1, American Geophysical Union (AGU) Geophysical Monograph Series 23, p. 293-316.
(Compilation of paleomagnetic data Japan, Philippines, Indonesia. E Mesozoic Sumatra was 10-20°S of present latitude; in Late Mesozoic drifted N with 30° CW rotation, reaching present position by E Tertiary)

Kadar, D. (1984)- Indonesia: Mapping by the Geological Research and Development Centre and stratigraphic correlation. Proc Fourth Working Group Meeting, Bangkok 1982, Stratigraphic Correlation between Sedimentary Basins of the ESCAP Region IX, UN Mineral Resources Development Series 51, New York, p. 30-46. *(online at: https://repository.unescap.org/server/api/core/bitstreams/af59f444-55be-45b4-9cd4-5e9f3517ad1a/content)*
(Good documentation of status of geological mapping of Indonesia by Geological Survey in early 1980s. With useful set of Indonesian basins stratigraphic correlation charts)

Kadarusman, A. (2001)- Geodynamic aspects of Indonesian region: a petrological approach. Ph.D. Thesis, Tokyo Institute of Technology, p. 1-456. *(Unpublished)*
(Study of metamorphic rocks of Timor-Tanimbar (Banda Outer Arc) region)

Kadarusman, A. (2002)- Plume tectonics and Eastern Indonesia. Proc. 31st Annual Conv. Indonesian Association Geologists (IAGI), Surabaya, p.

Kadarusman, A. (2009)- Ultramafic rock occurrences in Eastern Indonesia and their geologic setting. Proc. 38th Annual Conv. Indonesian Association Geologists (IAGI), Semarang, PIT IAGI2009-188, p. 1-7.
(online at: https://www.iagi.or.id/web/digital/26/2009_IAGI_Semarang_Ultramafic-Rocks-Occurences.pdf)
(Ultramafic rocks exposed in E Indonesia in E Kalimantan, Sulawesi, Halmahera, Banda Arc and Papua. Mostly derived from peridotite layer of ophiolite complexes, but some believed to be from orogenic peridotite. Source of nickel laterite, nickel sulfide deposits, also cobalt, chromite, platinum group metals and lateritic iron ores. E Sulawesi Ophiolite (Cretaceous-Oligocene age) occupies large part of E Sulawesi, resulted from Late Oligocene accretion to Sundaland margin and Late Miocene collision with Banggai Sula microcontinent)

Kadarusman, A. (2012)- The geology and tectonic of the Banda Arc, Eastern Indonesia:update from the outer arc. In: N.I. Basuki (ed.) Banda and Eastern Sunda arcs, Proc. Annual Conv. Indonesian Soc. Economic Geologists (MGEI), Malang 2012, p. 193-200.

Kadarusman, A., H. Brueckner, H. Yurimoto, C.D. Parkinson & S. Maruyama (2001)- Geochemistry and Sm-Nd age dating of garnet peridotites from Central Sulawesi, and their implications to the Neogene collision complex in Eastern Indonesia. EOS Transactions 82, American Geophysical Union, Fall Meeting Abstract T52D-08, 1p. *(Abstract only)*
(Orogenic garnet-bearing peridotites on Sulawesi, in two regions within NW-SE trending strike-slip fault zones: (1)left-lateral Palu-Koro FZ, as < 10 m wide fault slice associated with high-grade metamorphic rocks in Miocene granite; (2) in right-lateral Ampana FZ as 10-30 m wide, fault-bounded outcrops juxtaposed against gabbro and peridotites of E Sulawesi ophiolite. Sm-Nd dating gave mineral ages of 27-20 Ma (27 Ma likely time of peak metamorphism; 20 Ma cooling age). Likely metamorphosed during Late Oligocene- E Miocene continent-continent collision in C Sulawesi; after delamination uplifted within Neogene metamorphic complex)

Kadarusman, A., Y. Kaneko, T. Ohta & S. Maruyama (2003)- The geology and tectonic of the Banda Arc, Eastern Indonesia. Proc. 32nd Annual Conv. Indonesian Association Geologists (IAGI) and 28th HAGI Annual Conv., Jakarta, p. 1-17.
(Non-magmatic S Banda arc from Timor to Tanimbar exposes one of youngest high P/T metamorphic belts in world. Deformation and metamorphic grade increase towards center of 1 km thick crystalline belt. High P/T metamorphic rocks extruded as thin sheet into space between overlying ophiolites and underlying continental shelf sediments ('wedge extrusion model'). Quaternary uplift, marked by elevation of recent reefs, ~1260 m in Timor, decreasing toward Tanimbar in E. Exhumation of high P/T metamorphic belt started in W Timor in Late Miocene time and migrated east. Quaternary rapid uplift to rebound of subducting Australian continental crust beneath Timor after break-off the oceanic slab fringing continental crust)

Katili, J.A. (1970)- Large transcurrent faults in Southeast Asia with special reference of Indonesia. Geologische Rundschau 59, p. 581-600.
(Large transcurrent faults present in Taiwan-Philippine region and in the area between Sulawesi and E New Guinea, with mainly sinistral movement. Sumatran fault-system 1650km long, dextral lateral displacement. On Java smaller transcurrent faults with strike more or less parallel to island. Palu-Kuro Fault ('Fossa Sarasina') in C Sulawesi also sinistral transcurrent fault. Dextral transcurrent fault of ~100 km length in Gorontalo area, N Sulawesi. In W Papua E-W trending Sorong Fault. Two groups of transcurrent faults in SE Asia: NW-SE and E-W. Indonesian Archipelago is being protruded SE-ward, with major block movements along Philippine and Sumatran fault-zones)

Katili, J.A. (1971)- A review of the geotectonic theories and tectonic maps of Indonesia. Earth-Science Reviews 7, p. 142-165. *(also in Bull. of National Institute Geology and Mining, Bandung (1970) 3, 2, p. 57-69)*
(Good review of tectonic syntheses proposed for Indonesia from 1920's to 1970. Long ago Indonesian Archipelago recognized as place of intersection of two of large mountain systems and zone between Asian and Australian continents. They also realized that Indonesian island arcs represent early stage formation of mountain belt with systematic relationship of active tectonic and magmatic features to deep submarine trenches. New concept of plate tectonics best basis to explain features of Indonesian island arcs)

Katili, J.A. (1971)- Neotectonics of Southeast Asia. Bull. Association Francaise Etude du Quaternaire 4, p. 851-856.

Katili, J.A. (1972)- Plate tectonics of Indonesia with special reference to the Sundaland area. Proc. First Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, p. 57-61.
(One of the early papers re-interpreting Indonesia tectonics in a plate tectonic context)

Katili, J.A. (1973)- Plate tectonics and its significance for the search of mineral deposits in western Indonesia. United Nations ECAFE CCOP, Technical Bulletin 7, p. 23-37. *(online at: https://repository.unescap.org/server/api/core/bitstreams/02824758-88df-4f2d-a237-e8aa33c9b57e/content)*
(Early interpretation of Indonesia on basis of plate tectonic theory. W Indonesia magmatic arcs and subduction zones in Permian, Triassic-Jurassic, Cretaceous and Tertiary- Recent, tied to styles and ages of mineralization provinces. Late Jurassic Malayan Orogen contains tin, gold and bauxite. Cretaceous and Miocene arcs contain epithermal gold-silver ores, etc.)

Katili, J.A. (1973)- On fitting certain geological and geophysical features of the Indonesian island arc to the new global tectonics. In: P.J. Coleman (ed.) The Western Pacific: island arcs, marginal seas, geochemistry. University of Western Australia Press, p. 287-305.
(One of the early Katili papers re-interpreting Indonesia tectonics in a plate tectonic context)

Katili, J.A. (1973)- Geochronology of West Indonesia and its implication on plate tectonics. Tectonophysics 19, 3, p. 195-212.
(New radiometric ages of igneous rocks allow recognition of paleo-subduction zones of Permian, Triassic-Jurassic, Cretaceous, Miocene and Pliocene-Recent age. Radiometric ages of granites of Lassi Massif, Padang Highlands, C Sumatra (~112 Ma), Lampong Massif, S Sumatra (~88 Ma), offshore N Java (100 Ma), Sunda

Shelf Anambas (~86 Ma), Tembelan (~85 Ma) and Natuna (~75Ma). Permian granites near Jambi, S Sumatra ~276-298 Ma. With map of volcanic arcs of Paleozoic- Tertiary ages)

Katili, J.A. (1974)- Geological environment of the Indonesian mineral deposits; a plate tectonic approach. Geological Survey of Indonesia, Publikasi Teknik- Seri Geologi. Ekonomi 7, p. 225-236.
(Tertiary mineralization more significant in Sulawesi, Halmahera, Irian Jaya than Sumatra, Java, Lesser Sunda islands, possibly because Pacific Plate richer in metals than Indian Ocean)

Katili, J.A. (1975)- Geological environment of the Indonesian mineral deposits; a plate tectonic approach. CCOP, Technical Bulletin 9, p. 39-56
(online at: https://repository.unescap.org/server/api/core/bitstreams/6ac5e32a-61ce-4ed3-9bcb-8474d5152af6/content)
(Same as paper above)

Katili, J.A. (1975)- Volcanism and plate tectonics in the Indonesian island arcs. Tectonophysics 26, p. 165-188.
(Classic paper, showing reconstruction of outward migration of Indonesian volcanic arcs from Permian-Cretaceous- Oligo-Miocene to Recent)

Katili, J.A. (1980)- Geotectonics of Indonesia- a modern view. Directorate General of Mines, Jakarta, p. 1-271.
(Reprint collection book of J.A. Katili papers 1962-1978)

Katili, J.A. (1981)- Contradicting views on the plate tectonics of Indonesia and their bearing on heat flow research. Bull. Geological Research Development Centre (GRDC) 5, p. 21-29.

Katili, J.A. (1984)- Evolution of plate tectonic concepts and implication for the exploration of hydrocarbon and mineral deposits in Southeast Asia. Pangea (Center for Training and Exchanges in the Geoscience-CIFEG, Paris), 3, p. 5-18.

Katili, J.A. (1985)- Advancement of geoscience in the Indonesian region. Indonesian Association Geologists (IAGI), Bandung, p. 1-248.
(Reprint collection of Katili papers 1963-1985)

Katili, J.A. (1986)- On understanding the geological environment of the Southeast Asian mineral and hydrocarbon deposits in relation to the progressive development of plate tectonic concepts. Memoir of the Geological Society of China (Taiwan) 7, p. 45-68.

Katili, J.A. (1989)- Review of past and present geotectonic concepts of Eastern Indonesia. In: J.E. van Hinte et al. (eds.) Proc. Snellius II Symposium, Jakarta 1987, Netherlands J. of Sea Research 24, 2-3, p. 103-129.
(History of geotectonic concepts on E Indonesia since early 1900's)

Katili, J.A. (1989)- Evolution of the Southeast Asian arc complex. Geologi Indonesia (J. Indonesian Ass. Geol., IAGI) 12, 1 (Katili Special Volume), p. 113-143.

Katili, J.A. (1991)- Tectonic evolution of Eastern Indonesia and its bearing on the occurrence of hydrocarbons. Marine and Petroleum Geology 8, 1, p. 70-83.
(New Guinea first collided with Sepik island arc at ~30 Ma. At ~20 Ma subduction pattern reorganization resulted in 8000 km long, E-W arc-trench system from Sumatra to Buru. Prior to arrival of Australian continent at SE Asian continental margin, a N-S oriented Sulawesi-Mindanao volcanic arc existed ~800 km E of Borneo. New Guinea and Sepik collided with Inner Melanesian island arc, opening Australian Plate to influence of WNW moving Pacific Plate. At ~10 Ma S-dipping subduction zone broke through N of Irian Jaya but no volcanism. Oil and gas in pull-apart basins of Irian Jaya in Tertiary deposits, but source rocks in collision zones likely Mesozoic. Exploration targets in E Indonesia: Arafura Shelf intracratonic basins, marginal (rift) basins skirting S and E of Banda arc, collision zones of Timor, Seram, E Sulawesi and W Papua thrustbelt)

Katili, J.A. & S. Asikin (1985)- Hydrocarbon prospects in complex paleo subduction zones. Proc. 14th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, 1, p. 83-103.
(No significant hydrocarbons in accretionary wedge of W Indonesia. Sumatra fore-arc basin lacks coarse quartz-rich reservoirs; hydrocarbon source rocks are immature. Arc-trench system of E Indonesia different. Two phases in Banda Arc: (1) Indian-Australian plate oceanic crust subducted under Banda oceanic plate, (2) subduction of Australian continental crust into Banda Arc subduction zone. Oceanic crust dipping in Sumatra-Java Trench covered by thin pelagic sediments, but parts of shelf -slope sequences of Arafura Platform carried into Tanimbar Trench and Aru Through. Consolidated lower part of sequence greater shear strength and little material from there scraped off and incorporated in wedge. If rich in organic material, tectonic processes in trench and beneath wedge will mature organic material. If reservoir rocks exist in front of wedge, migration and accumulation possible. Oil and gas in subduction complex of E Sulawesi may be explained in same way)

Katili, J.A. & S. Asikin (1987)- Hydrocarbon prospects in complex paleo subduction zones. Proc. 22nd Session Committee Co-ord. Joint Prospecting Mineral Resources in Asian Offshore Areas (CCOP), Guangzhou 1985, 2, p. 279-301.
(Same paper as above)

Katili, J.A. & H.M.S. Hartono (1983)- Complications of Cenozoic tectonic development in Eastern Indonesia. In: T.W.C. Hilde & S. Uyeda (eds.) Geodynamics of the western Pacific-Indonesian region, American Geophysical Union (AGU) and Geological Society of America (GSA) Geodynamics Series 11, p. 387-399.
(Tectonic development of Indonesian archipelago as SE margin of Eurasian plate can be followed since Late Paleozoic from continental nucleus located between Sumatera and Kalimantan Archipelago developed E-ward until it attained present position as represented by Banda volcanic arc. During Late Paleozoic and throughout Mesozoic development of Sunda Arc system regular and always had arcuate shape of volcanic arc around continental margin. Tertiary more complicated)

Katili, J.A. & P. Marks (1963)- Geologi. Departemen Urusan Research Nasional, Kilatmadju Bandung, p. 1-855.
('Geology'. First general geology textbook in Indonesian language, with numerous illustrations from Indonesia)

Katili, J.A. & J.A. Reinemund (1984)- Southeast Asia: tectonic framework, earth resources and regional geological problems. International Union Geological Sciences (IUGS), Publ. 13, p. 1-68.

Katili, J.A. & R. Soetadi (1971)- Neotectonics and seismic zones of the Indonesian Archipelago. In: B.W. Collins & R. Fraser (eds.) Proc. International Symposium Recent crustal movements and associated seismicity, Bull. Royal Society of New Zealand 9, p. 39-45.

Katili, J.A. & H.D. Tjia (1969)- Outline of Quaternary tectonics of Indonesia. Bull. of National Institute Geology and Mining (NIGM), Bandung, 2, 1, p. 1-12.
(online at: http://jrisetgeotam.com/index.php/NIGM/article/viewFile/164/159)
(Four types of Quaternary tectonic deformation. Marine terraces around Bangka and Billiton on stable Sunda Shelf formed by Quaternary sea level highstands. Post-glacial strandlines at 0.5-1m (3500 BP), 1.5-2m (5000 BP) and 5m (6000 BP) above present sea level)

Kaufmann, G.F. (1951)- The tectonic framework of the Far East and the influence on the origin and accumulation of petroleum. Proc. 3rd World Petroleum Congress, The Hague, 1, p. 87-118.

Kaymakci, N., J. Decker, D. Orange, P. Teas & P. Van Heiningen (2013)- Geodynamic evolution of the Banda Sea region. American Geophysical Union (AGU) Fall Meeting, San Francisco, 1p. *(Abstract only)*
(online at: http://adsabs.harvard.edu/abs/2013AGUFM.T41B2574K)
(Summary of main structural elements of E Indonesia, from Sulawesi in W to W Papua in E, across N part of Banda Arc. N boundary of 'Birds Head' of W Papua is sinistral Sorong strike-slip fault zone with >48km displacement over last few Myrs. W boundary fault of Cendrawasih Basin defines E boundary of Birds Head

and corresponds to Wandamen Peninsula with high-P metamorphic rocks with exhumation ages from 4-1 Ma. Birds Head and Pacific Plate coupled, so Birds Head completely detached from Irian Jaya. Etc.)

Kaymakci, N., J. Decker, D. Orange, P. Teas & P. Van Heiningen (2015)- Tectonic characteristics and evolution Banda Sea region. AAPG-SEG Int. Conference Exhibition (ICE), Melbourne 2015, p. 564. *(Abstract only)*
(online at: https://library.seg.org/doi/10.1190/ice2015-2205090)
(From M Miocene onwards, Banda Sea started to be devolved due to retreat and roll-back of N-ward subducting Indo-Australian oceanic plate below SE-most Eurasian margin. Process facilitated by trench perpendicular tear in slab, dissecting Sulawesi along Palu-Matana Fault and delimits S boundaries of Banggai-Sula, Birds Head (BH) and N boundary of Banda Sea plate. Sorong Fault Zone separates Birds Head and Halmahera and accommodated >48 km sinistral offset over last few Myrs. E margin of Cendrawasih Basin is major transpressive belt along which BH and main body of Papua/ Irian Jaya is decoupled. Etc.)

Kenyon, C.S. & L.R. Beddoes (1977)- Geothermal gradient map of Southeast Asia. SEAPEX/ Indonesian Petroleum Association (IPA) Publ., p.
(see also updated version by Rutherford & Qureshi 1981)

Kenyon, C.S., K. Roberti, M. Hughes-Clarke & M. de Matharel (1976)- Geothermal gradient map of Indonesia, a progress report. Proc. 5th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, p. 81-90.

Kertapati, E.K. (2006)- Aktivitas gempabumi di Indonesia- perspektif regional pada karakteristik gempabumi merusak. Centre for Geological Survey, Bandung, Special Publ., p.
('Earthquake activity in Indonesia- regional perspective')

Kertapati, E.K., A. Soehami & A. Djuhanda (1992)- Seismotectonic map of Indonesia, 1: 5 Million, Geological Research Development Centre (GRDC), Bandung.
(see also 2nd Edition, 1998)

Kessler, F.L. & J. Jong (2016)- The South China Sea: sub-basins, regional unconformities and uplift of the peripheral mountain ranges since the Eocene. Berita Sedimentologi 35, p. 5-54.
(online at: www.iagi.or.id/fosi/berita-sedimentologi-no-35-palaeogene-of-the-eastern-margin-of-sundaland-part-1.html)

Ketner, K.B. (1973)- Geologic research in Indonesia. U.S. Geological Survey (USGS) Open-File Report 73-143, p. 1-46.
(online at: https://pubs.usgs.gov/of/1973/0143/report.pdf)
(Mainly a listing of English-language geological publications/ reports prior to 1973, by USGS geologist Keith B. Ketner, seconded to Geological Survey of Indonesia in 1970-1972)

Klompe, Th.H.F. (1951)- De structurele en economische betekenis der Mesozoische plooiingsfasen voor Zuidoost-Azie. Inaugural address Professor of Geology, University of Indonesia, Bandung, Vorkink, p.
('The structural and economic significance of the Mesozoic folding phases for Southeast Asia')

Klompe, Th.H.F. (1957)- Pacific and Variscan orogeny in Indonesia. A structural synthesis. Indonesian J. Natural Science (Majalah Ilmu Alam untuk Indonesia) 113, p. 43-87.
(Pre-plate tectonic tectonic synthesis of Indonesia. Stratigraphic and structural features of Indonesia suggests major differences between E and W parts. In E Indonesia extensive Paleozoic ('Variscan orogeny') land mass development, modified by later regeneration and epeirogenic movements. No trace of Paleozoic/ Variscan orogeny in W part, but widespread effects of Pacific orogeny (Mesozoic))

Klompe, Th.H.F. (1961)- Pacific and Variscan orogeny in Indonesia. A structural synthesis. Proc. 9th Pacific Science Congress, Bangkok 1957, 12, p. 76-115.

(online at: http://archive.org/details/geologyandgeophy032600mbp)
(Same as Klompe (1957) paper above)

Klompe, Th.H.F., J.A. Katili, Johannas & Soekendar (1957)- Late Palaeozoic- Early Mesozoic volcanic activity in the Sunda Land area. Indonesian J. Natural Science (Majalah Ilmu Alam untuk Indonesia) 113, p. 89-104.
(On Permian- Triassic volcanics of C Sumatra, Triassic Pahang volcanics in Malay Peninsula and W-C Borneo. Two zones of Late Paleozoic- E Mesozoic volcanic activity: (1) northern, more acid zone in Malaya and C Borneo, and (2) southern, more basic zone in Sumatra. Djambi volcanites do not originate from Malaya, but form part of autochthonous series. This, and lack of indications for thrust movements in west C Sumatra, make occurrence of postulated sheet structures in Djambi and other parts of west C Sumatra rather doubtful. 'Perfect correlation between Permian volcanic series of Jambi and Silungkang Fm', Padang Highlands, W Sumatra, but different from Pahang Volcanics of Malay Peninsula)

Klompe, Th.H.F., J.A. Katili, Johannas & Soekendar (1961)- Late Palaeozoic- Early Mesozoic volcanic activity in the Sunda Land area. Proc. 9th Pacific Science Congress, Bangkok 1957, 12, p. 204-217.
(Same paper as Klompe et al. (1957), above)

Klompe, Th.H.F. & Sigit Soetardjo (1954, 1965)- Geologic map of Indonesia 1:2,000,000. Direktorat Geologi Indonesia, Bandung, and U.S. Geological Survey (USGS) Miscellaneous Geological Investigations. Map I-414, 2 sheets.
(Milestone compilation map of geology of Indonesia by Klompe (1954), updated by Sigit Soetardjo in 1962, published by USGS in 1965)
(West sheet online at: https://pubs.usgs.gov/imap/0414/plate-2.pdf)
(East sheet online at: https://pubs.usgs.gov/imap/0414/plate-1.pdf)

Koesoemadinata, R.P. (2020)- Introduction to the geology of Indonesia. Ikatan Alumni Geologi ITB, ITB Press, Bandung, Vol. 1, p. 1-1057, Vol. 2, p. 1-670. *(open access digital edition early 2025)*
(vol. 1 online at: https://www.itbpress.id/buku-gratis/?fbclid=IwY2xjawILVytleHRuA2F#
(vol. 2-3 online at: https://www.itbpress.id/buku-gratis/?fbclid=IwY2xjawILVytleHRuA2F#
(Comprehensive book on the geology of Indonesia, in two volumes, with focus on sedimentary basins)

Koesoemadinata, R.P. & D. Noeradi (eds.) (2003)- Indonesian island arcs: magmatism, mineralization and tectonic setting. Penerbit ITB, Bandung, p. 1-361.
(Collection of papers by professor R. Soeria-Atmadja 1974-2001, reprinted at 'Pak Rubini's retirement from ITB)

Koesoemadinata, R.P. & A. Pulunggono (1974)- Offshore Tertiary sedimentary basins in Indonesia. Proceedings Institut Teknologi Bandung (ITB) 8, 3, p. 91-107.
(online at: https://journals.itb.ac.id/index.php/jmfs/article/view/9659)
(Early overview of offshore basins, originally presented at 12th Pacific Science Congress in 1971. With schematic cross sections of Sunda Shelf, Java Sea and Paternoster Platform)

Koesoemadinata, R.P., L. Samuel & M.I. Tachjudin (1995)- Subsidence curves and modelling of some Indonesian Tertiary basins. In: G.H. Teh (ed.) Southeast Asian basins: oil and gas for the 21st century, Proc. AAPG-GSM Int. Conference, Kuala Lumpur 1994, Bull. Geological Society Malaysia 37, p. 205-230.
(online at: https://gsm.org.my/wp-content/uploads/gsm_file_2/702001-100951-PDF.pdf)
(Subsidence curves of N and S Sumatra, Barito, NE Java and Salawati Basins constructed from well-bore data, calibrated by micropaleontology and seismic sections. All basins Tertiary age, but differences and similarities in basin forming mechanics, depositional fill and final modifying tectonics. Barito Basin typical foreland basin subsidence curve related to flexuring of continental crust, related to docking of Paternoster-East Sunda microcontinent on Sunda continent. N and S Sumatra and NW and NE Java basins back-arc basins)

Koesoemadinata, R.P., L. Samuel & M.I.T. Taib (1999)- Subsidence curves and basin mechanism of some Tertiary basins in Western Indonesia. Buletin Geologi (ITB) 31, 1, p. 23-56.

Koesoemadinata, R.P., S.I. Qivayanti & A.H.P. Kesumayana (1999)- Shale compaction curves of Tertiary basins of Western Indonesia. Proc. 28th Annual Conv. Indonesian Association Geologists (IAGI), Jakarta, 3, p. 83-92.
(online at: https://www.iagi.or.id/web/digital/57/8.pdf)
(Shales exponential reduction of initial porosity value of 75% to 38% in upper 500m. From 500m down linear reduction to 3% below ~3000m?)

Koning, L.P.G. (1952)- Earthquakes in relation to their geographical distribution, depth and magnitude. I. The East Indian Archipelago. Proc. Koninklijke Nederlandse Akademie van Wetenschappen, Amsterdam, B55, 1, p. 60-77.
(First of series of papers on global distribution of earthquakes. Deep-focus earthquakes in Indonesia not arranged in single inclined surface, sloping to depth of 600 km and dipping towards continents, as previously suggested, but two separate seismic zones: (1) from W coast of Sumatra to Java, Lesser Sunda Islands to New Guinea and (2) J-shaped belt in NE part)

Koninklijk Nederlandsch Aardrijkskundig Genootschap (A.J. Pannekoek et al.) (1938)- Atlas van Tropisch Nederland. Batavia, 31 plates.
(Classic atlas with 38 topographic maps, mainly from Indonesian region, including details of volcanoes)

Koomans, C.M. (1938)- On tektites and pseudotektites from Dutch East Indies and Philippines. Leidsche Geologische Mededelingen 10, p. 63-80.
(online at: www.repository.naturalis.nl/document/549606)
(Some reported tektites in Indonesian region are true extra-terrestrial tektites (billitonites, Java, Thailand, Luzon), others are 'pseudo-tektites' (pebbles of volcanic glass/ obsidian; Palembang, Garut, Gunung Kiamis))

Koto, B. (1899)- On the geologic structure of the Malayan Archipelago. J. Faculty of Science, Imperial University of Tokyo 11, 2, p. 83-120.
(online at: http://repository.dl.itc.u-tokyo.ac.jp/dspace/bitstream/2261/32675/1/jcs011007.pdf)
(Very early review of Indonesia geology by a Japanese author)

Koulali, A., S. Susilo, S. McClusky, I. Meilano, P. Cummins, P. Tregoning, G. Lister, J. Efendi & M.A. Syafi'i (2016)- Crustal strain partitioning and the associated earthquake hazard in the eastern Sunda- Banda Arc. Geophysical Research Letters 43, 5, p. 1943-1949.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1002/2016GL067941)
(GPS measurements of surface deformation show convergence between Australian Plate and Sunda Block in E Indonesia partitioned between megathrust and continuous zone of back-arc thrusting extending 2000 km from E Java to N of Timor. Partitioning occurs via CCW rotation of arc segment called Sumba Block, and left-lateral movement along major NE-SW strike-slip fault W of Timor. Also W-ward extension of back-arc thrust for 300 km onshore into E Java, accommodating slip of ~6 mm/yr)

Krabbenhoeft, A., R.W. Weinrebe, H. Kopp, E.R. Flueh, S. Ladage, C. Papenberg, L. Planert & Y. Djajadihardja (2010)- Bathymetry of the Indonesian Sunda margin-relating morphological features of the upper plate slopes to the location and extent of the seismogenic zone. Natural Hazards Earth System Sciences (EGU) 10, p. 1899-1911.
(online at: www.nat-hazards-earth-syst-sci.net/10/1899/2010/nhess-10-1899-2010.pdf)
(Review of variations in character along Sunda subduction zone from N Sumatra to East of Java. Off Sumatra wider seismogenic zone with larger earthquakes. Variations controlled by increasing age of crust of subducting plate from W to E, decrease in thickness of sediment cover from W to E, topography of downgoing plate, etc.)

Kreemer, C., W.E. Holt, S. Goes & R. Govers (2000)- Active deformation in Eastern Indonesia and the Philippines from GPS and seismicity data. J. of Geophysical Research 105, B1, p. 663-680.
(online at: http://onlinelibrary.wiley.com/doi/10.1029/1999JB900356/epdf)

(GPS and seismicity data show Java Trench delineates Australian plate (AU) - Sunda block boundary W of Sumba, but E of Sumba convergence distributed over back-arc and Banda Sea and no subduction at Timor Trough. In New Guinea most motion is strike-slip in N part of island, delineating Pacific- Australian plate boundary. Some trench-normal convergence at New Guinea Trench, evidence that strain is partitioned to accommodate oblique Pacific- Australia motion. Sulawesi Trench may take up some of AU-Sunda motion)

Kuenen, P.H. (1932)- Remarks on the undation theory of Van Bemmelen. Proc. Koninklijke Nederlandse Akademie van Wetenschappen, Amsterdam, 35, 9, p. 1155-1160.
(online at: https://dwc.knaw.nl/DL/publications/PU00016337.pdf)
(Early criticism on Van Bemmelen's newly proposed, controversial tectonic 'undation theory')

Kuenen, P.H. (1934)- Relations between submarine topography and gravity field. In: F.A. Vening Meinesz (1934), Gravity expeditions at sea 1923-1932, Waltman, Delft, 2, Chapter 8, p. 183-193.
(online at: www.ncg.knaw.nl/Publicaties/Groen/pdf/04VeningMeinesz.pdf)
(Two types of deep water basins in Indonesia, each with two sub-groups)

Kuenen, P.H. (1935)- Geological interpretation of the bathymetrical results. In: Scientific results of the Snellius Expedition in the Eastern part of the Netherlands East Indies (1929-1930), 5. Geological Results, 1, Kemink, Utrecht, p. 1-124.
(online at: https://resolver.kb.nl/resolve?urn=MMKB24:073716000:pdf)
(Descriptions and interpretations of E Indonesia seafloor morphology. Includes overview of earlier tectonic syntheses of region)

Kuenen, P.H. (1936)- The negative isostatic anomalies in the East Indies (with experiments). Leidsche Geologische Mededelingen 8, 2, p. 169-214.
(online at: www.repository.naturalis.nl/document/549385)
(Sandbox compressional deformation modeling of crustal buckling, in attempt to model the belts of negative gravity anomalies of Vening Meinesz))

Kuenen, P.H. (1938)- Submarine slopes of volcanoes and coral reefs in the East Indian Archipelago. Comptes Rendus Congres International de Geographie, Amsterdam 1938, Brill, Leiden, 2, Oceanographie, p. 93-98.
(online at: https://resolver.kb.nl/resolve?urn=MMKB06:000004273:pdf)
(Brief review of slopes volcanoes and reefs (Tukang Besi, etc.) from submarine hydrographic survey data))

Kuenen, P.H. (1939)- Sediments of the East Indian Archipelago. In: P.D. Trask (ed.) Recent marine sediments: a symposium, AAPG/ Society for Sedimentary Geology (SEPM), Tulsa, Special Publ. 4, p. 348-355.
(Marine sediments of East Indonesia Archipelago vary greatly in character. Sediments in shallow Java Sea in S rel. fine-grained and rich in volcanic debris; in N, near Borneo, rel. coarse and rich in quartz. Deep water $CaCO_3$ content decreases with water depth, from ~50% in water <500 m deep to <5 % below 5000 m.. In areas in which the sea floor slopes > 5°, $CaCO_3$ content is greater at 2500-3500m than at depths of 1500-2500 m, perhaps due to slumping of sediments. Sediments of Kau Bay contain H_2S and $Fe2S_3$ and also are rich in organic matter, all as result of stagnation in 500 m deep with sill depth connection with sea only 50 m deep)

Kumar, R.T.R., T.K. Maji & R.R. Nair (2010)- Assessment of flexural analysis applied to the Sumatra-Java subduction zone. J. Earth System Science 119, 5, p. 717-730.
(Lithospheric mechanical strength variations of Indian Ocean subduction zone in Sumatra-Java from Bouguer gravity and bathymetry data. Strong coupling between subducting and over-riding plates and deeper mantle contributing to shallow focus-high magnitude seismicity for Sumatra, and vice versa for Java)

Kurniawan, A. (2014)- Geologi batuan granitoid di Indonesia dan distribusinya. Masyarakat Ilmu Bumi Indonesia 1, E-3, p. 1-16.
(online at: https://www.academia.edu/7756498/Geologi_Batuan_Granitoid_di_Indonesia_dan_Distribusinya)
('The geology of granitoid rocks in Indonesia and their distribution'. Brief review of distribution of granitoids in Indonesia. In Sumatra 3 groups: (1) Volcanic Arc Granitoid (U Triassic- Pliocene, 203- 5 Ma), (2) Main Range

Granitoid (E Triassic- E Cretaceous, 247-143 Ma), (3) Eastern Granitoid (U Permian- U Jurassic, 264-216 Ma). In Kalimantan 4 groups: (1) Natuna-Semitau-Sanggau (Triassic-Jurassic), (2) Meratus (Carboniferous-Cretaceous), (3) Schwaner (Cretaceous- E Tertiary), (4) C Kalimantan Tertiary Arc (Late Eocene- E Miocene). Also Java, Lesser Sunda Islands, Sulawesi- Banggai Sula (3 groups) and W Papua (two groups: (1) Birds Head/ Permian-Triassic and (2) Papuan foldbelt/ U Pliocene). No maps)

Kusumahbrata, Y. (2008)- Geoheritage of Indonesia. In: M.S. Leman et al. (eds.) Geoheritage of East and Southeast Asia. Institut Alam Sekitar dan Pembangungan(LESTARI), Universiti Kebangsaan Malaysia, Kuala Lumpur, and CCOP, Bangkok, p. 57-92.
(online at: www.ccop.or.th/download/pub/CCOP-geoheritage-book.pdf)
(Proposed geological monuments in Indonesia)

Lam, H.J. (1930)- Het genetisch-plantengeografisch onderzoek van den Indischen Archipel en Wegener's verschuivingstheorie. Tijdschrift Koninklijk Nederlands Aardrijkskundig Genootschap 2, 47, p. 553-581.
(online at: https://resolver.kb.nl/resolve?urn=MMUBA13:001673001:pdf)
('The genetic- plantgeographic investigation of the Indies Archipelago and Wegener's Continental drift theory'. Historically interesting review of plant communities and possible significance for plate movements)

Lam, H.J. (1937)- On a forgotten floristic map of Malaysia (H. Zollinger, 1857). Blumea 1937, Supplement 1, p. 176-182
(online at: https://repository.naturalis.nl/pub/526331/BLUMSUP1937001001023.pdf
(Alternatively titled "Wallace versus Zollinger", by Dutch plant biogeographer and Director of the Rijksherbarium in Leiden, Herman J. Lam (1892-1977). Laments the fact that divide between Asian and 'Australian' faunas and floras in Malay Archipelago, best known since 1860, 1869 as the 'Wallace Line', was already known to Salomon Muller (1839), Earle (1845) and was also depicted on a forgotten map by Swiss naturalist Heinrich Zollinger (1857))

Lambiase, J.J. (2011)- The stacked-channel reservoir sands of SE Asia. SEAPEX Exploration Conference, Singapore 2011, Presentation 26, p. 1-40. *(Presentation package)*

Landenberger, E. (1922)- Die Geologie von Niederlandisch-Indien, nebst einem kurzen Anhang Die Geologie der Philippinen. Schweizerbart Verlag, Stuttgart, p. 1-216.
('The geology of Netherlands Indies, with a short chapter on the geology of the Philippines'. Early overview of Indonesia geology, written for travelers. Not much new)

Lebedev, S. & G. Nolet (2003)- Upper mantle beneath Southeast Asia from S velocity tomography. J. of Geophysical Research 108, B1, 2048, p.
(3D S-velocity model of SE Asian- W Pacific upper mantle with 400-km lateral resolution. Hard to interpret?)

Lee, C. & R. McCabe (1986)- The Banda-Celebes-Sulu Basin: a trapped piece of Cretaceous- Eocene oceanic crust? Nature 322, 6074, p. 51-54.
(Banda basin underlain by oceanic crust, previously interpreted as trapped oceanic basin which was once continuous with Late Jurassic Argo abyssal plain (Bowin et al., etc.). Newly identified magnetic reversal ages, heatflow data, etc., suggest Celebes and Sulu Seas may have been continuous with Banda basin, and are all part of dissected Cretaceous-Eocene oceanic basin (Banda and Sulu Seas basins age now commonly accepted to be of Late Miocene- Pliocene age (Hamilton 1979, Hinschberger et al. 2001); JTvG))

Lee, T.Y. (1992)- Cenozoic plate reconstruction of Southeast Asia and sequence stratigraphy and tectonics of the Tainan Basin, offshore southwestern Taiwan. Ph.D. Thesis, University of Texas, Austin, p. 1-240.
(Paleocene (60 Ma) - Recent plate reconstructions of SE Asia)

Lee, T.Y. & L.A. Lawver (1994)- Cenozoic plate reconstruction of the South China Sea region. Tectonophysics 235, 1-2, p. 149-180.

Lee, T.Y. & L.A. Lawver (1995)- Cenozoic plate reconstruction of Southeast Asia. Tectonophysics 251, p. 85-138.
(Reconstructions of SE Asia region from 60- 5 Ma. Impact between Greater India and SE Asia in NW part of SE Asia, probably from M Eocene- E Miocene, W of Burma block, so no reason to assume Sumatra, Malay Peninsula and Kalimantan should extrude to SE along left-lateral Mae Ping and Three Pagodas fault zones as suggested by Peltzer and Tapponnier (1988). Opening of C Thailand basins, Gulf of Thailand, and Malay Basin require dextral megashear zone to compensate relative motion between Indochina and Malay Peninsula, which may extend into W Kalimantan and serve as boundary between Indochina block and Kalimantan)

Lejay, P. (1946)- Gravimetrie et tectonique dans les Indes Neerlandaises. Bull. Societe Geologique France (5), 16, p. 525-540.
('Gravimetry and tectonics of the Netherlands Indies')

Leman, M.S., A. Reeedman & C.S. Pei (2008)- Geoheritage of East and Southeast Asia. Inst. Alam Sekitar dan Pembangunan (LESTARI) and CCOP, p. 1-320.
(online at: www.ccop.or.th/download/pub/CCOP-geoheritage-book.pdf)
(Book describing geological monuments and proposed monuments in Indonesia and other Asian countries)

Lemenkova, P. (2020)- Java and Sumatra segments of the Sunda Trench: geomorphology and geophysical settings analysed and visualized by GMT. Glasnik Srpskog Geografskog Drustva (Bull. Serbian Geographical Society) 100, 2, p. 1-23.
(online at: https://doiserbia.nb.rs/img/doi/0350-3593/2020/0350-35932002001L.pdf)
(Russian paper on submarine geomorphology of Sunda Trench in W Indonesia. With good images of West Indonesia topography/bathymetry, offshore sediment thickmess, free air gravity, geoid model, etc.)

Lemenkova, P. (2020)- Analysis of the difference in depths and variation in slope steepness of the Sunda Trench, Indonesia, East Indian Ocean, Revista de Geomorfologie 22, 1, p. 21-41
(online at: https://revistadegeomorfologie.ro/geo/index.php/revista/article/view/96/55)
(Analysis of differences in depths and variation in slope steepness between the two segments of Sunda Trench in S Java and N Sumatra. More about available data and methods than results?- JTvG))

Letouzey, J., P. de Clarens, J. Guignard & J.L. Berthon (1983)- Structure of the North Banda- Molucca area from multi-channel seismic reflection data. Proc. 12th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, p. 143-156.
(N Banda-Molucca area at junction of three converging plates, a mosaic of remnant and active island arcs and continental and oceanic fragments. NW-SW late Neogene thrusts and anticlines in NE part of S Halmahera. S of Halmahera several sinistral, transcurrent, reverse faults prolong Sorong fault. From deep Salawati basin to N Buru large tectonic zone with mud diapirs. Due to collision, possible remnants of Molucca Sea Plate outcrop in E arm of Sulawesi and Obi Island. Good cross-sections Seram- Halmahera area)

Letouzey, J. & C. Muller (1988)- Structure of sedimentary basins in Eastern Asia. Proc. 7th Offshore South East Asia Conference, Singapore 1988, SEAPEX Proceedings 8, p. 63-68.
(Cross sections through E Asian basins S China Sea, Philippines, NW Borneo, etc.)

Letouzey, J., L. Sage & C. Muller (1988)- Geological and structural maps of eastern Asia- introductory notes. American Assoc. Petroleum Geol. (AAPG), Tulsa, p. 1-52. + 3 map sheets 1: 2,500,000.
(Three 1:2.5M scale maps, with introductory notes and cross-sections, compiled by Institut Francais du Petrole)

Letouzey, J., P. Werner & A. Marty (1990)- Fault reactivation and structural inversion. Backarc and intraplate compressive deformations. Example of the eastern Sunda shelf (Indonesia). Tectonophysics 183, p. 341-362.
(online at: https://www.academia.edu/19551149/Fault_reactivation_and_structural_inversion_Backarc_and_intraplate_compressive_deformations_Example_of_the_eastern_Sunda_shelf_Indonesia_)

(Three main Cenozoic tectonic periods:(1) Paleogene- E Miocene extension with graben fill (2) quiescent period, (3) M Miocene- Recent folding/ inversion/ thrusting. Many folds on E Sunda Platform are inversions of Paleogene grabens)

Leupold, W. & I.M. van der Vlerk (1931)- The Tertiary. In: B.G. Escher et al. (eds.) Stratigraphie van Nederlandsch Oost-Indie (K. Martin memorial volume), Leidsche Geologische Mededelingen 5, p. 611-648.
(online at: www.repository.naturalis.nl/document/549456)
(Overview of Tertiary formations and correlations across the 'Netherlands Indies' in K. Martin memorial volume. With formation correlation table and Tertiary larger foraminifera range chart))

Lin, Y.A., L. Colli, J. Wu & B.S.A. Schuberth (2020)- Where are the Proto-South China Sea slabs? SE Asian plate tectonics and mantle flow history from global mantle convection modeling. J. of Geophysical Research: Solid Earth 125, 12, e2020JB019758, p. 1-25.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2020JB019758)
(Four proto-S China Sea plate reconstruction models compared to tomographic images. S-ward PSCS subduction produces slabs beneath present Palawan, N Borneo, and offshore Palawan. Double-sided PSCS subduction combined with earlierBorneo rotations reproduce subhorizontal slabs under southern SCS at ~400-700 km depths and best fit seismic tomography. PSCS slabs now at <900 km under present-day Borneo, SCS, Sulu and Celebes Seas and S Philippines. Modeled Sundaland dynamic topography strongly depends on imposed plate reconstructions, varying by almost 1 km)

Linthout, K., H. Helmers & J. Sopaheluwakan (1997)- Late Miocene obduction and microplate migration around the southern Banda Sea and the closure of the Indonesian Seaway. Tectonophysics 281, p. 17-30.
(online at: https://www.academia.edu/7322502/Late_Miocene_obduction_and_microplate_migration_around_the_southern_Banda_Sea_and_the_closure_of_the_Indonesian_Seaway)
(Miocene shallowing and closure of Indonesian Seaway between Indian Ocean-Pacific related to plate-tectonic developments at S margins of Banda Sea. Model good agreement with 9.9-7.5 Ma history of shallowing and closure of Indonesian Seaway, as inferred from biogeographic patterns and thermal evolution of Miocene Equatorial Pacific waters. Obduction/post-obduction exhumation curve of Kaibobo ultramafic complex and its sole on Seram, suggests obduction started at ~9.5 Ma, emplacement was completed at ~ 8 Ma and fast vertical movements continued until ~7 Ma. Obduction of lherzolitic complex on N Timor also at 8 Ma and cooling to 300°C at 5.5 Ma, similar to Kaibobo. Proposed model features interarc spreading in short-lived, interarc Timor Plate (16-9.5 Ma) just N of line Timor-Tanimbar, lengthening of E Sunda volcanic arc by creation of volcanic Banda Arc, obduction-emplacement and exhumatian of ultramafics, and migration of Seram microcontinent)

Linthout, K., H. Helmers & J. Sopaheluwakan (1999)- Dual subduction and a Neogene microplate between Australia and the Banda Sea. In: H. Darman & F.H. Sidi (eds.) Tectonics and sedimentation of Indonesia, FOSI-IAGI-ITB Regional Seminar to commemorate 50th anniversary of Van Bemmelen's Geology of Indonesia, Bandung 1999, p. 92. *(Abstract only)*
(New tectonic model requires separate Timor microplate in Neogene, now part of Banda collision zone. Paleomagnetic data suggests Timor island contains allochthonous terranes that were separated from N Australian margin by >2500km in E Cretaceous. Late Neogene Banda Arc not related to subduction of 2500km of oceanic crust during Cretaceous- Pliocene. Upside-down metamorphism of Late Miocene age in soles of ultramafites requires obduction of hot lithosphere, etc. No figures)

Lloyd, P.M., R. Koch, D. Desautels, M. Amiruddin, M. Zain & R. Davis (1999)- Chasing channel sands in Southeast Asia. In: G.H. Teh (ed.) Proc. 9th Regional Congress Geology Mineral Energy Resources of SE Asia (GEOSEA '98), Kuala Lumpur 1998, Bull. Geological Society Malaysia 43, p. 377-384.
(online at: https://gsmpubl.files.wordpress.com/2014/09/bgsm1999038.pdf)

Longley, I.M. (1997)- The tectonostratigraphic evolution of Southeast Asia. In: A.J. Fraser, S.J. Matthews & R.W. Murphy (eds.) Petroleum Geology of Southeast Asia. Geological Society, London, Special Publ. 126, p. 311-340.

(Tertiary tectono-stratigraphic evolution of SE Asia four phases: (1) 50-43.5 Ma: Start of India-Eurasia collision, reducing in convergence along Sunda Arc subduction system, resulting in extension in adjacent fore-arc and back arc areas; (2) 43.5-32 Ma: termination of oceanic subduction beneath India-Eurasia collision zone caused plate reorganization, producing second phase of rifting, with onset of extension in S China Sea and Makassar Straits failed rift. First major collision of Luconia Shoals block with subduction along NW Borneo margin; (3) 32-21 Ma): first phase of S China Sea seafloor spreading, rotations creating Malay Basin and inversion along Sunda Arc ending rifting in these basins; (4) 21–0 Ma: cessation of first phase of seafloor spreading inS China Sea caused by collsion of Baram block with NW Borneo subduction system. Collisions in NW Borneo, Sulawesi and Timor areas, with rotation of Sumatra resulted in extensive structural inversion)

Longley, I.M. (2000)- Extrusion collusion and rotational confusion in SE Asian tectonic models. AAPG International Conference Exhib. Abstracts, American Assoc. Petroleum Geol. (AAPG) Bull. 84, 9, p. 1458. *(Abstract only)*
(In Paleogene SE Asia experienced rift phase with no significant transtension or transpression. Extrusion tectonics also fails to explain origin of backarc basins of Sumatra and Java, Malay Basin, etc. Paleogene evolution mainly driven by M Eocene plate re-organisation caused by India-Eurasia collision, with extrusion tectonics only as Neogene modifier to basins formed by Paleogene rifting. Model suggests all Tertiary rotations in SE Asia are clockwise, initially due to opening of S China Sea and later due to effects of extrusion tectonics)

Longley, I.M. (2002)- Extrusion tectonics- give it up!- it does not explain the Tertiary evolution of SE Asia. Indonesian Petroleum Association (IPA) Newsletter, June 2002, p. 16-19.

Longman, M. (1993)- Southeast Asian Tertiary carbonate reservoirs. Petroconsultants, 2 vols. *(Unpublished)*

Lovholt, F., D. Kuhn, H. Bungum, C.B. Harbitz & S. Glimsdal (2012)- Historical tsunamis and present tsunami hazard in eastern Indonesia and the southern Philippines. J. of Geophysical Research: Solid Earth 117, B09310, p. 1-19.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2012JB009425)
(With maps of historic tsunami occurrences and regional tsunami hazard maps in E Indonesia-Philippines)

Lowell, J.D. (1980)- Wrench vs. compressional structures with application to Southeast Asia. Proc. SE Asia Petroleum Exploration Society (SEAPEX) Conference 5, Singapore, p. 63-70.
(Criteria to distinguish between wrench and compressional faults. With examples of compressional faults in Kawengan, NE Java, and wrench structures in Pungut/ Tandun fields in C Sumatra)

Lukk, A.A. & V.G. Leonova (2022)- Sundaland: undeformed lithospheric block of Southeast Asia. Izvestiya, Atmospheric and Oceanic Physics 58, 7, p. 778–804.
(online at: https://www.researchgate.net/publication/366929150_Russian_Text_C_The_Authors_2022)
(Review of present-day geodetic data for SE Asia confirm assumption that central part (Sunda Plate) can be regarded as a rigid stable block with a continental lithosphere. Boundaries are represented by subduction zones and areas of recent continental tectonic deformation, where most deformation is concentrated)

Lukk, A.A. & V.I. Shevchenko (2008)- Island arcs, deep-sea trenches, and seismofocal zones of Indonesia and the Pacific Ocean; similarity and distinctions. Izvestia, Physics Solid Earth, Russian Academy of Sciences, 44, 2, p. 85-118.
(Non-plate tectonic interpretation, suggesting island arcs, deep-sea trenches and seismofocal zones of Indonesia differ from those of Pacific ring proper)

Luan, X. (2024)- A model of plate tectonic framework for the Southeast Asia margin in the mid-Cretaceous. Earth-Science Reviews 259, 104970, p.
(A global scale Cretaceous granitoid belt can be identified from Sikhote-Alin in N all the way to NW Borneo and Qiangtang terrane of Tibet, representing a giant magmatic arc system in response to direction change of subduction of Izinagi plate and Indian-Australian plate at ~100 Ma. This global subduction/magmatic system was displaced in E Cenozoic as result of India-Asian collision,with development of escape tectonics

characterized by strike-slip fault systems.Subsequent rifting further broke and dispersed granitoid belts into fragments to present locations in Greater SE Asian tectonic realm)

Lunt, P. (2003)- Biogeography of some Eocene larger foraminifera, and their application in distinguishing geological plates. Palaeontologia Electronica 6, 1, p. 1-22.
(online at: http://palaeoelectronica.org/paleo/2003_2/geo/issue2_03.htm)
(Eocene larger foram assemblages can help distinguish between carbonates from Asian-Pacific-Mediterranean (Pellatispira-Assilina) or Australian- New Guinea (Lacazinella) realms (Nummulites and Discocyclina-Asterocyclina present in both realms))

Lunt, P. & X. Luan (2024)- When, how much, how fast, and why it matters. A quantitative view of stratigraphy and the emergence of a new paradigm. Berita Sedimentologi 49, 3, p. 18-46.
(online at: https://journal.iagi.or.id/index.php/FOSI/article/view/431/419)
(Review of outdated concepts and paradigms in Cenozic stratigraphy of SE Asia, and the need for a more quantitative approach)

Lunt, P. & P.J. Woodroof (2023)- Tectono-stratigraphic controls on Cenozoic Southeast Asian carbonates. In: E.C. Rankey & M.C. Poppelreiter (eds.) Cenozoic isolated carbonate platforms- Focus Southeast Asia, Society for Sedimentary Geology (SEPM) Special Publ. 114, p. 85-110.
(online at: https://www.academia.edu/102441248/TECTONO_STRATIGRAPHIC_CONTROLS_ON_CENOZOIC_SOUTHEAST_ASIAN_CARBONATES)
(Review of stratigraphic framework for Cenozoic carbonates and related deposits of numerous localities in SE Asia, and their tectonic settings. With Late Eocene- Late Miocene paleogeographic maps)

Luo, Y., L.F. Zhao, Z.X. Ge, X.B. Xie & Z.X. Yao (2021)- Crustal Lg-wave attenuation in Southeast Asia and its implications for regional tectonic evolution. Geophysical J. International 226, p. 1873-1884.
(online at: http://sourcedb.igg.cas.cn/cn/zjrck/200907/W020210617384705757479.pdf)
(On crustal attenuation structure of geological blocks in SE Asia from earthquake data. Prominent low-attenuation anomalies in Sundaland Core (= stable ancient crust, incl. Indochina, Malay Peninsula, East Sumatra, Sunda Shelf and Borneo Core). Strong attenuation regions associated with complex tectonic conditions (Indo-Australian subduction zone, sutures in Sarawak and Sabah). Borneo Core and Singapore Platform may belong to same block (similar strength features). Borneo Core likely similar long accretion history with Malay Peninsula and E Sumatra. Etc.)

MacPherson, C.G. & R. Hall (1999)- Tectonic controls of geochemical evolution in arc magmatism of SE Asia. Proc. 4th PACRIM Congress, Bali 1999, Australasian Institute of Mining and Metallurgy (AusIMM), Melbourne, p. 359-368. *(online at: https://www.researchgate.net/profile/Colin-Macpherson-2/publication/292027433_Tectonic_controls_of_geochemical_evolution_in_arc_magmatism_of_SE_Asia)*
Retreats or advances in subducting plates trench hinge important control on presence or absence of magmatism. Several locations in SE Asia show magmatism with geochemical signature of subduction, but are far from active subduction zones. Such magmatism requires earlier period of mantle enrichment by subduction but may also result from localized extension. Adakitic magmatism occurred in tectonic settings where there is no evidence for subduction of young oceanic crust at that time)

MacPherson, C.G. & R. Hall (2002)- Timing and tectonic controls in the evolving orogen of SE Asia and the western Pacific and some implications for ore generation. In: D.J. Blundell et al. (eds.) The timing and location of major ore deposits in an evolving orogen, Geological Society, London, Special Publ. 204, p. 49-67.
(online at: https://www.researchgate.net/publication/228846989_Timing_and_tectonic_controls_in_the_evolving_orogen_of_SE_Asia_and_the_western_Pacific_and_some_implications_for_ore_generation)
(Review of SE Asia tectonics and associated mineral deposits. Timing and location of hydrothermal mineralization often related to major events at plate boundaries)

Madon, M.B.H. (1999)- Plate tectonic elements and evolution of Southeast Asia. In: The Petroleum Geology and Resources of Malaysia, Chapter 4, Petronas, Kuala Lumpur, p. 61-76.

Malaihollo, J.F.A., R. Hall & C.G. MacPherson (2002)- SE Asia radiometric ages: GIS Database. University of London report, p. 1-16.
(online at: www.gl.rhul.ac.uk/seasia/ages/SEAsia_GIS.pdf)

Marks, P. (1956)- Indonesia. In: L. Dubertret (ed.) Lexique Stratigraphique International III, 7, International Geological Congress, Stratigraphy Commision, Paris, p. 5-241.
(Alphabetical overview of Indonesian region formation names and characteristics)

Marks, P. (1957)- Stratigraphic lexicon of Indonesia. Djawatan Geologi (Indonesia Geol. Survey), Publikasi Keilmuan 31, Seri Geologi, Bandung, p. 1-242.
(Reprint of Marks (1956); see also 1961 Atlas. Useful overview of Indonesian region formation names and characteristics. See also updated and expanded version by Harahap et al., 2003)

Marks, P. and Geological Survey of Indonesia (1961)- Stratigraphic lexicon of Indonesia- Atlas. Djawatan Geologi (Indonesia Geol. Survey), Publikasi Keilmuan 31A, Seri Geologi, Bandung, p. 1-135.
(Addendum to Marks (1957) lexicon. Compilation of location maps of type areas of stratigraphic formations, some with cross-sections)

Martin, K. (1883)- Die wichstigen Daten unserer geologischen Kenntniss vom Niederlandisch Ost-Indischen Archipel. Bijdragen Land- Taal Volk. van Nederlandsch-Indie, 6th Int. Congres Orientalisten, Leiden 1883, p. 17-32.
(Brief overview of geological knowledge and ages of rocks of Indonesian islands, as known in 1883)

Martin, K. (1884)- Wissenschafliche Aufgaben, welche der geologischen Erforschung des Indischen Archipels gestellt sind. Wetenschappelijke voordrachten gehouden te Amsterdam in 1883, ter gelegenheid der Koloniale Tentoonstelling, E.J. Brill, Leiden, p. 64-92.
(online at: http://hdl.handle.net/1887.1/item:1058374)
('Scientific challenges posed by the geological investigations of the Indies Archipelago'. Text of 1883 lecture; no figures)

Martin, K. (1903)- Reisen in den Molukken, in Ambon, den Uliassern, Seran (Ceram) und Buru, Geologischer Teil. E.J. Brill, Leiden, p. 1-296.
(online at: http://resolver.staatsbibliothek-berlin.de/SBB0000778100030000)
('Travels in the Moluccas, in Ambon, the Uliassers, Seram and Buru'. Report of 1891-1892 pioneering geological investigations on E Indonesia islands by Prof. K. Martin of the Leiden Geological Museum)

Martin, K. (1907)- Eene bijdrage tot de geologische geschiedenis van den Indischen archipel. Handelingen 9th Nederlandsch Natuur- Geneeskundig Congres 11, Leiden 1907, p. 56-75.
('A contribution to the geological history of the Indies Archipelago'. Lecture text; no illustrations)

Martin, K. (1907)- Ein zweiter Beitrag zur Frage nach der Entstehung des ostindischen Archipels. Geographische Zeitschrift 13, 8, p. 425-438.
('A second contribution to the development of the East Indies archipelago')

Martin, K. (1907)- Mesozoisches Land und Meer im indischen Archipel. Neues Jahrbuch Mineralogie Geologie Palaontologie 1907, 1, p. 107-130.
(online at: https://www.zobodat.at/pdf/Neues-Jb-Min-Geol-Palae_1907_0107-0130.pdf)
('Mesozoic land and sea in the Indies Archipelago'. Early discussion of Mesozoic paleogeography of Indonesia. No maps or figures)

Martin, K. (1914)- Wann loste sich das Gebiet des Indischen Archipels von der Tethys? Sammlungen Geologischen Reichs-Museums Leiden, ser. 1, 9, 1, p. 337-355.
(online at: www.repository.naturalis.nl/document/552392)
('When did the Indies Archipelago separate from the Tethys?'. Partly commentary of Haug (1908-1911), who drew Tethys geosyncline into SE Asia and New Guinea. According to Martin, Mesozoic faunas of Indonesia have indeed significant numbers of European species but Eocene and younger mollusc faunas have no European species, suggesting there was no longer a 'Tethys' marine connections between the two (but Eocene and E Miocene larger foraminifera do have similarities; JTvG))

Martin, K. (1931)- Wann loste sich das Gebiet des Indischen Archipels von der Tethys? (eine Fortsetzung). Leidsche Geologische Mededelingen 4, p. 1-8.
(online at: www.repository.naturalis.nl/document/549337)
('When did the area of the Indies Archipelago separate from the Tethys? (a continuation)'. Follow up on Martin (1914) paper. Late Eocene and Neogene mollusc assemblages of Java (and Philippines, Burma, NW India) of Indo-Pacific/ Indo-Malayan character with few or no European species, suggesting no marine connections between the two since that time)

Martin, S.S., P.R. Cummins & A.J. Meltzner (2022)- Gempa Nusantara: a database of 7380 macroseismic observations for 1200 historical earthquakes in Indonesia from 1546 to 1950. Bull. Seismological Society of America 112, 6, p. 2958-2980. *(manuscript online at: https://dr.ntu.edu.sg/bitstream/10356/166257/3/Martinetal%282022%29-gempanusantara_2.pdf)*
(Compilation of 7380 macroseismic observations for 1200 historical earthquakes in Indonesia between 1546 and 1950 C.E.. Building on Wichmann (1918) catalogue of earthquakes and many other original texts)

Martini, R. (2007)- An overview of Upper Triassic carbonate deposits of Indonesia: palaeogeographic and geodynamic implications. 5th Swiss Geoscience Meeting, Geneve 2007, p. 201-202.
(Summary of U Triassic carbonates around Banda Sea (Sinta Ridge, C-E Sulawesi, Buru, Seram, Misool and off NW Australia (Wombat Plateau, W Timor). In U Triassic, Seram-Buru and E Sulawesi/ Kolonodale Block two separate entities, former located in more tropical position. Seram-Buru Block originated from Irian Jaya area, Kolonodale Block (E Sulawesi) from Australian NW Shelf/ Argo Abyssal Plain. No clear similarities between Triassic of Timor and Papua-New Guinea, NW coast of Australia, Wombat Plateau. Allochthonous Triassic of Timor sedimentary evolution different from that of Australian margin and microcontinents of Banda Sea)

Martodjojo, S. (1976)- Stratigraphic concepts in Indonesia, development and present status. In: Proc. Regional Special Working Group meetings, 1973 and 1975, vols. III and V, UN-ESCAP Mineral Resources Development Series 42, B12, p. 63-67. *(online at: https://repository.unescap.org/server/api/core/bitstreams/b3b316b9-f95c-4a60-8926-4153bb464b44/content)*
(Review of history of stratigraphic concepts in Indonesia, with correlation tables of biozones and stages. Geological- stratigraphic activities stagnant between 1945-1962)

Martodjojo, S. & Djuhaeni (1996)- Sandi stratigrafi Indonesia- Edisi 1996. Komisi SSI-IAGI, Indonesian Association Geologists (IAGI), Jakarta, p. 1-34.
(online at: www.iagi.or.id/wp-content/uploads/2012/04/Sandi-Stratigrafi-Indonesia-1996.pdf)
('Stratigraphic Code of Indonesia'. Indonesian version of International Stratigraphic Guide)

Matsubayashi, O. & T. Nagao (1991)- Compilation of heat flow data in Southeast Asia and its marginal seas. In: V. Cermak & L. Rybach (eds.) Terrestrial heat flow and lithosphere structure, Springer Verlag, Heidelberg, p. 444-456.
(Compilation of heat flow data in SE Asia from published data as of 1988 and unpublished data obtained from combining published temperature gradient data of hydrocarbon exploratory wells with average thermal conductivity for individual basins estimated from published data)

Matsubayashi, O. & T. Nagao (1991)- Heat flow measurements in Southeast Asia and their geophysical implications- a review. United Nations ESCAP, CCOP, Technical Publication 24 (25th Anniversary Volume), p. 140-155.

McCaffrey, R. (1996)- Slip partitioning at convergent plate boundaries of SE Asia. In: R. Hall & D.J. Blundell (eds.) Tectonic evolution of SE Asia, Geological Society, London, Special Publ. 106, p. 3-18.
(Active tectonics of Sumatra, Philippines, New Guinea fold-and thrust belt, Huon-Finisterre collision and San Cristobal trench can be understood in terms of upper plate deformation associated with oblique convergence. W Java may also exhibit partitioning of oblique subduction. Structures accommodating normal and shear components of motion often very close. Arc-parallel strain rates estimated for forearcs of region. In Sumatra oblique convergence results in NW translation and stretching of forearc area)

McInnes, B.I.A., N.J. Evans, F.Q. Fu, S. Garwin, E. Belousova, W.L.Griffin, A. Bertens, D. Sukarna, S. Permanadewi et al. (2005)- Thermal history analysis of selected Chilean, Indonesian and Iranian porphyry Cu-Mo-Au deposits. In: T.M. Porter (ed.) Super porphyry copper and gold deposits: a global perspective, PGC Publishing, Adelaide, p. 27-42.
(U-Pb-He triple-dating age determinations for porphyry Cu±Mo±Au deposits, including. Modelling results for Indonesian porphyry deposits: (1) Grasberg (W Papua), emplaced at 800m at 3.1 Ma, exposed at surface 1.7 Ma; (2) Batu Hijau (SW Sumbawa), emplaced at 2400m at ~3.8 Ma, exposed at surface 1.23 Ma; (3) Ciemas (SW Java), emplaced at 5500m at ~17.8 Ma, exposure at surface 5.34 Ma)

Merritts, D., R. Eby, R.A. Harris, R.L. Edwards & H. Cheng (1998)- Variable rates of Late Quaternary surface uplift along the Banda Arc- Australian collision zone, eastern Indonesia. In: I.S. Stewart & C. Vita-Finzi (eds.) Coastal Tectonics, Geological Society, London, Special Publ. 146, p. 213-224. *(online at: https://geology.byu.edu/0000017e-4622-def1-af7f-ee3e42e10001/1998-uplift-rates-merritts-et-al-pdf)*
(Radiometrically dated emergent coral terraces from SE Indonesia provide estimates of vertical strain in Banda Arc-continent collision complex. Roti island uplift 170m in last ~125,000 years. Late Quaternary surface uplift rates vary significantly along strike of Banda orogen. Vertical displacement rates greatest in young parts of orogen where shelf-slope break recently has been underthrust beneath orogenic wedge, as at Roti, and in older parts of orogen where retroarc thrust faulting occurs, as at Alor island)

Michel, G.W., M. Becker, D. Angermann, C. Reigber & E. Reinhart (2000)- Crustal motion in E- and SE-Asia from GPS measurements. Earth Planets and Space 52, 10, p. 713-720.
(online at: https://link.springer.com/content/pdf/10.1186%2FBF03352270.pdf)
(GPS measurements across SE Asia from GEODYSSEA project show differential plate motions. Sundaland-South China is stable tectonic block, decoupled from Eurasia, moving S relative to India and Australia)

Michel, G.W., Y.Q. Yu, S.Y. Zhu, C. Reigber, M. Becker, E. Reinhart, W. Simons et al. (2001)- Crustal motion and block behaviour in SE Asia from GPS measurements. Earth Planetary Science Letters 187, p. 239-244.
(online at: www.geologie.ens.fr/~vigny/articles/sunda_epsl.pdf)
(Sundaland stable tectonic block, moving E rel. to Eurasia at ~12 mm/yr; moves S rel. to India and Australia)

Miller, M.S., L.J. O'Driscoll, N. Roosmawati, C.W. Harris, R.W. Porritt, S. Widiyantoro, L.T. da Costa, E. Soares, T.W. Becker & A.J. West (2016)- Banda Arc experiment- transitions in the Banda Arc-Australian continental collision. Seismological Research Letters 87, 6, p. 1-7.
(online at: http://www-udc.ig.utexas.edu/external/becker/preprints/mm16.pdf)
(About ongoing Banda Arc passive seismic experiment. Recorded >600 local earthquakes by June 2016 (see also Porritt et al. 2016))

Milsom, J. (1999)- Arc-continent collision in SE Asia: Eastern Indonesia and Papua New Guinea. London University SE Asia Research Group, Report 201, p. 1-32. *(Unpublished)*
(Arc-continent collisions taking place today in NE New Guinea and E Indonesia and Taiwan, all started between 7- 3 Ma. Evidence of older collisions in E Indonesia and New Guinea)

Milsom, J. (2000)- Stratigraphic constraints on suture models for Eastern Indonesia. J. Asian Earth Sciences 18, 6, p. 761-779. *(online at: http://directory.umm.ac.id/Data%20Elmu/jurnal/J-a/Journal%20of%20Asian%20Earth%20Science Etc.)*
(Tectonostratigraphies of Outer Banda Arc islands (Sumba, Timor, Seram, etc.) suggest these were once part of Sundaland margin and that N and S Banda Sea basins are Late Cenozoic extensional features (first author to propose the slab rollback model for Banda Seas, subsequently supported with tomographic data by Spakman and Hall 2010; JTvG). Three separate tectonostratigraphic groups (1) Sundaland margin (SW Sulawesi, Sumba) (2) Birds Head/ Sula Spur; with Late Paleozoic granites similar to central PNG; and (3) Banda Association (Buton, Buru, Seram, W Kai, Banda ridges, E Sulawesi; rifted from Gondwanaland in Jurassic)

Milsom, J. (2001)- Subduction in eastern Indonesia: how many slabs? Tectonophysics 338, 2, p. 167-178.
(Seismicity associated with arc-continent collision in E Indonesia testifies to past N-directed subduction of Indian Ocean lithosphere beneath Banda Sea. Shallow-intermediate seismicity around Banda Arc supports subduction of two separate slabs, but between 150-500 km one continuous slag with 'shoehorn' shape. This shape confirms presence of subducted lithosphere beneath Seram in N, as well as beneath Timor in S. This is incompatible with subduction of two unconnected plates, and implies rapid E-wards retreat of subduction trace (Milsom was first author to suggest 'roll-back' of subducting Indian Ocean slab as mechanism for creation of Banda Sea; but has not generally been credited for it; JTvG))

Milsom, J. (2003)- Forearc ophiolites: a view from the western Pacific. In: Y. Dilek & P.T. Robinson (eds.) Ophiolites in Earth history, Geological Society, London, Special Publ. 218, p. 507-515.
(online at: https://www.academia.edu/17392252/Ophiolites_in_Earth_History)
(Review of ophiolites in New Guinea and farther East)

Milsom, J. (2003)- The shape of subduction in Eastern Indonesia. Indonesian Petroleum Association (IPA) Newsletter, March 2003, p. 10-14.

Milsom, J. (2009)- The Caribbean: an oroclinal basin? In: K.H. James et al. (eds.) The origin and evolution of the Caribbean Plate, Geological Society, London, Special Publ. 328, p. 139-154.
(Interesting comparisons between Caribbean oroclinal system and Banda Sea region of E Indonesia)

Milsom, J. (2023)- East Asian analogues for early Alpine orogenesis. Swiss J. of Geosciences 116, 20, p. 1-21.
(online at: https://link.springer.com/article/10.1186/s00015-023-00448-x)
(Review of present-day tectonic processes during early collision, as can be seen in islands of Indo-Pacific gateway between SE Asia and Australia: (1) seamount subduction at Java Trench (seamount subduction not easy and partial accretion to forearc wedge is likely); (2) strain partitioning and sliver plate during oblique convergence in Sumatra; (3). syntaxis (major change in orientation of main fold -thrust structures) in Luzon; (4) orocline in Banda Sea (hyperextension); (5) small oceanic basins in Solomon Sea. These offer insights into start of orogenesis in foldbelts like Alps and Carpathians. Studies of Banda gateway area emphasise importance of impact on subduction zones of topography on downgoing plate, and of effects of flows in asthenosphere on lithosphere tectonics)

Milsom, J. & M.G. Audley-Charles (1986)- Post-collision isostatic readjustment in the Southern Banda Arc. Geological Society, London, Special Publ. 19, p. 351-364.
(Late Miocene-mid-Pliocene compression resulted in emplacement from N of large thrust sheets on deformed Australian margin near Timor. During last 3 Ma compression unimportant but vertical movements common and rapid. In N Timor and Banda volcanic arc, uplift is occurring where gravity data suggest there should be subsidence. Possible explanation of high gravity values is cold, dense, subducted slab which is now sinking independently after rupture near continental margin. Because of rupture, sinking slab no longer exerts downward pull on overlying lithosphere which now rebounds isostatically)

Milsom, J., M.G. Audley-Charles, A.J. Barber & D.J. Carter (1983)- Geological-geophysical paradoxes of the Eastern Indonesia collision zone. In: T.W.C. Hilde & S. Uyeda (eds.) Geodynamics of the western Pacific-

Indonesian region, American Geophysical Union (AGU) and Geological Society of America (GSA) Geodynamics Series 11, p. 401-411.
(Geology of Sunda and Banda arcs not all in accord with classic plate tectonic models; many unanswered questions)

Milsom, J., D. Masson & G. Nichols (1992)- Three trench endings in Eastern Indonesia. Marine Geology 104, p. 227-241.
(Terminations of Sunda, Philippine and New Guinea trenches in E Indonesia associated with presence of blocks of thickened crust. Transition between Sunda Trench and Timor-Tanimbar Trough consequence of collision with NW Australian continent. S termination of Philippine Trench defined by presence of oceanic plateau. New Guinea Trench terminates in W at N-trending Mapia Ridge seafloor rise. No clear indications of present day subduction along N margin of New Guinea and subduction may have ceased in W-most part of New Guinea Trench and oceanic crust of Ayu Basin W of Mapia Ridge and N of Birds Head postdates active subduction)

Milsom, J. & V. Rocchi (1998)- The long wavelength gravity field in SE Asia. J. Geological Society of China, Taipei, 41, 4, p. 489-495.
(In SE Asia long wavelength field strongly correlated with anomalously high seismic velocities in mantle due to presence of deep subducted lithosphere. Comparisons with tomography indicate long wavelength field influenced most strongly by mass excesses in lower mantle, below 600 km discontinuity. Gravity patterns suggest subduction zones formerly existed close to present-day E and possibly W coastlines of Borneo and that E-ward extension of active margin of Eurasian Plate to Banda Arc is very recent)

Milsom, J., Sardjono & A. Susilo (2001)- Short-wavelength, high-amplitude gravity anomalies around the Banda Sea, and the collapse of the Sulawesi Orogen. Tectonophysics 333, 1-2, p. 61-74.
(High-density ophiolitic rocks outcropping on islands around Banda Sea in many cases associated with strong gravity anomalies and steep gravity gradients. Bouguer gravity levels and gradients over extensive E Sulawesi Ophiolite generally low. Most positive anomalies in Banda Arc due to ophiolites superimposed on steep regional gravity gradient but in W Seram spatial separation between two. On Buru gradient >10 mGal/km suggests presence of shallow, very dense rocks, despite absence of ophiolites in outcrop. Ophiolite distribution on Sulawesi and around Banda Sea compatible with ?Oligocene collision that produced Sulawesi orogen, which collapsed after collision with Australian-derived microcontinent)

Milsom, J., J. Thurow & D. Roques (2000)- Hydrocarbon source rocks and the paleogeography of Eastern Indonesia. SEAPEX Press 3, 4, p. 42-44, 49.
(Many of the islands surrounding Banda Sea are fragments of 'East Sulawesi Microcontinent' (ESM), which rifted off Australia- New Guinea margin in Late Triassic or E Jurassic, to collide with Eurasia margin in E Miocene. Parts of this continent are now in E Sulawesi, Buton, Buru and Seram and share Late Triassic bituminous marine shale deposits. Parts of Timor similar as well. Late Triassic of Sula Spur and New Guinea in continental facies and with granite intrusions, so clearly still part of Gondwana. In 'bacon-slicer model' Sula Spur therefore must have rifted off New Guinea at later date)

Mitchell, A.H.G. (1984)- Initiation of subduction by post-collision foreland thrusting and back-thrusting. J. Geodynamics 1, 2, p. 103-120.
(Ages of subduction zones bordering five collisional orogens suggest subduction may have initiated by foreland thrusts and backthrusts. Examples used include Late Jurassic at N Sunda Arc (Sumatra- Malaya), end-Miocene in Negros trench (Philippines) and incipient S-ward subduction of Banda Sea beneath Timor)

Mohr, E.C.J. (1930)- De grond van Java en Sumatra. De Bussy, Amsterdam, p. 1-258.
(online at: https://www.delpher.nl/nl/boeken/view?identifier=MMKB21:045974000:00014)
('The soils of Java and Sumatra'. 2nd edition of 1922 book)

Mohr, E.C.J. (1933)- De bodem der Tropen in het algemeen en die van Nederlandsch-Indie in het bijzonder. Mededelingen Koninklijk Instituut van de Tropen, De Bussy, Amsterdam, vol. 1, p. 1-342.

('The soils of the tropics in general and those of the Netherlands Indies in particular'. In four volumes.1933-1938. Three additional volumes between 1933-1938 and English translation in 1944)

Mohr, E.C.J. (1944)- The soils of equatorial regions with special reference to the Netherlands East Indies. J.W. Edwards, Ann Arbor, p. 1-766.
(online at: https://archive.org/details/in.ernet.dli.2015.52981)
(English translation of Mohr (1934) by R.L. Pendleton)

Mohr, E.C.J. & F.A. van Baren (1954)- Tropical soils; a critical study of soil genesis as related to climate, rock and vegetation., W. Van Hoeve; The Hague and Interscience Publishers, New York, p. 1-498.
(Update of Mohr (1933) book of tropical soils, in particular of Indonesia)

Molengraaff, G.A.F. (1915)- Folded mountain chains, overthrust sheets and block-faulted mountains in the East Indian archipelago. 12th International Geological Congress, Toronto 1913, p. 689-702.
(Important, early interpretation of Timor geology. Island chain from Timor and Babar to Ceram and Buru much alike in geological structure: nucleus of thrust-faulted Permian- Eocene, covered by Neogene-Pleistocene that is not folded but generally uplifted high above sea level. Two main thrust sheets on Timor:(1) lower 'Tethys sheet' (Triassic-Cretaceous oceanic deposits) and (2) upper 'Fatu sheet' (Permian- Eocene in shallower marine facies: Permian fusulinid-crinoid limestones and tuffs, Triassic oolitic and coral limestones, schists, Eocene Nummulites-Alveolina limestones, etc., often found as isolated 'klippen', separated by squeezed and thrusted layers). On N coast highly tilted basic igneous rocks, with common brecciated serpentinites, geological position uncertain. Alpine style of thrusting in Late Miocene. followed by Pliocene-Recent uplift of island (common uplifted Late Pliocene- Pleistocene coral reefs; possibly Basin-Range style block faulting?). With simplified geologic map and cross-section of Central Timor)

Molengraaff, G.A.F. (1919)- De invloed van de geologische ligging der Nederlandsche kolonien in Oost-Indie op haar economische beteekenis. Tijdschrift Koninklijk Nederlands Aardrijkskundig Genootschap (2), 36, 5, p. 539-550.
(online at: https://resolver.kb.nl/resolve?urn=MMUBA13:001665001:pdf)
('The influence of the geological setting of the Dutch colonies in the East Indies on its economic significance'. Lecture summary Amsterdam; no figures)

Molengraaff, G.A.F. (1922)- Geologie. In: De zeeen van Nederlandsch Oost Indie, Koninklijk Nederlands Aardrijkskundig Genootschap, Brill, Leiden, Chapter 6, p. 272-357.
(online at: https://www.biodiversitylibrary.org/item/86172#page/346/mode/1up)
(Geology chapter in 'The seas of the Netherlands East Indies' book. Early overview of morphology and bottom sediments of Indonesian Seas, distribution of coral reefs, etc. Earliest recognition of incised Pleistocene river channels on Sunda Platform)

Morley, C.K. (2024)- Atypical syn-collisional wedges at thrust fronts: Their tectonic and gravity-driven development, and interpretation-related controversies. Earth-Science Reviews 249, 104663, p. 1-54.
(Examples of atypical syn-collisional wedges, which resemble accretionary prisms, but formed over subducted and/or underthrust lower plate continental crust in orogens. These syn-collision wedges can be in the order of several 100 kms wide (in transport direction) and > 8 km thick).Exampes discussed include (1) offshore Sabah and Palawan ('North Sabah-Pagasa Wedge', Miocene, developed on underthrusting of 300km wide Dangerous Grounds continental crust under NW Borneo in Miocene (post-Nido Limestone)), (2) Indo-Burma Ranges (Rakhine Basin, Myanmar), (3) Banda Arc (Timor, Kai, Seram; deepwater fold and thrust belts are syn-collisional wedges, not accretionary prisms), and other areas

Morley, R.J. (2014)- Rifting and mountain building across Sundaland, a palynological and sequence biostratigraphic perspective. Proc. 38th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, IPA14-G-011, p. 1-20.
(online at: https://www.researchgate.net/publication/280042281_Rifting_and_Mountain_Building_Across_Sundaland_a_Palynological_and_Sequence_Biostratigraphic_Perspective)

(On timing of rifting and uplift events of Sundaland, constrained by palynology and sequence stratigraphy. Makassar/ Java Sea rifts initially formed at start of M Eocene (~49 Ma), with non-marine deposition and low paleo-elevations, followed by marine deposition in second rift phase in Late Eocene. Extensive uplift in Borneo began in latest E Miocene, with further uplift at ~8 Ma. N and W rifts of Sunda region initiated in Late Eocene, with synrift phase ending at ~31 Ma. Some rifts, especially in W Natuna and Malay Basin, characterised by Oligocene deep lake systems, which persisted for >6 Myrs)

Morley, R.J. (2018)- The complex history of mountain building and the establishment of mountain biota in Southeast Asia and Eastern Indonesia. In: C. Hoorn et al. (eds.) Mountains, climate and biodiversity, John Wiley & Sons, p. 475-492.
(Uplift scenarios for present and former upland areas in SE Asia from tectonic reconstruction, sedimentation rate changes and records of pollen of montane plants. Cenozoic pollen record reflects three different patterns with respect to mountain building across the region. (1) pollen record of southern conifers shows Pliocene - Pleistocene uplift of Lenguru fold belt and uplift of Birds Head in W Papua and Sumatra and Java, and provides examples of dispersal of Gondwanan elements into Sunda region; (2) In Equatorial Borneo, Ericaceae upland pollen indicate M and Late Miocene uplift of Borneo Central Ranges; (3) Thirdly, pollen of Laurasian conifers Picea, Abies and Tsuga from N Sunda Shelf, Borneo and Indochina indicate former occurrence of uplands with seasonal climate. Etc.)

Morley, R.J. & H.P. Morley (2018)- Montane pollen indicates character of Mid Cenozoic uplands across Sunda Shelf. In: PESGB SEAPEX Asia Pacific E&P Conference, London 2018, 4p *(Extended Abstract) (online at: www.researchgate.net/publication/326345401_Montane_pollen_indicates_character_of_mid_Cenozoic Etc.)*
(Montane pollen common element of palynomorph assemblages across Sundaland region and provides insight into paleoaltitudes and paleoclimates from Paleocene- Pliocene. In Late Eocene-Oligocene, Natuna Arch, Con Son Swell and Ammanite Ranges likely reached sufficient altitude to support temperate broadleaf and cool temperate conifer forests at altitudes of 2500m or more. Late Miocene-Pliocene uplifts in Borneo (Kinabalu, Meratus) and Sumatra Barisan Range. Volcanoes of Java formed in Pleistocene)

Morley, R.J. & H.P. Morley (2022)- SEA depositional cycles, regional unconformities and the 'pulsebeat' of sedimentation across the Sunda region. Proc. SEAPEX-PESGB Asia Pacific E&P Conference, London 2022, p. 1-35. *(Abstract + Presentation)*
(SEA transgressive-regressive sequences useful chronostratigraphic tool. 46 depositional cycles from late Eocene to Pliocene recognised in review of 101 wells from Malaysia. In Paleogene non-marine basins offshore Vietnam and West Natuna Basin, 406 kyr eccentricity-driven astronomical cycles provide that pulsebeat and allow age interpretations of otherwise difficult-to-date fluvial and lacustrine successions in rift basins across region)

Morley, R.J. & H.P. Morley (2022)- Vegetation and climate change across tropical Asia during the Pleistocene. Proc. Workshop on Ecological drivers of Pleistocene hominin and faunal dispersal across Southeast Asia (EPHSEA 2022), Bangkok, p. 10. *(Abstract only)*
(online at: https://drive.google.com/drive/folders/1Xgtqkk-R6c: teD6tBnjFniH6QiERN7PcI)
(The suggestion that Pleistocene hominin and mammal faunas migrated fro Asia to Java along a 'savanna corridor' is dismissed. More likely there was a corridor of semi-evergreen forests across equatorial Sundaland. Even during Pleistocene glaciations perhumid rain forests remained along the Equator, with savanna occurring to N, in Indochina.Seasonal evergreen and deciduous forests expanded across emergent Java Sea and Java)

Morley, R.J., H.P. Morley & T. Swiecicki (2016)- Mio-Pliocene palaeogeography, uplands and river systems of the Sunda region based on mapping within a framework of VIM depositional cycles. Proc. 40th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, IPA16-506-G, p. 1-26. *(online at: www.researchgate.net/publication/303550112_Mio-Pliocene_Palaeogeography_Uplands_And_River Etc.))*
(Paleogeography and sedimentation rates for Sunda region. Paleogeographic maps for 10 E Miocene-Pleistocene time slices. In M Miocene bulk of sedimentation across Sunda region on enlarged Proto-Mahakam Delta (4 times larger than today's Mahakam Delta) with minimal sedimentation off Sarawak. In latest Middle-Late Miocene sedimentation rates increased off Sarawak and sharply reduced in Makassar Straits; interpreted

to reflect redirection of sediment transport as result of Borneo uplift and capture of Proto Mahakam River by Sarawak rivers in Late Miocene)

Morley, R.J., H.P. Morley & T. Swiecicki (2017)- Constructing Neogene palaeogeographical maps for the Sunda region. In: SEAPEX Exploration Conference 2017, Singapore, Session 7, p. 1-10. *(Extended Abstract)*
(online at: https://www.seapex.org/wp-content/themes/seapex/images/pdf/Session-7/7_1-Palynova.pdf)
(Generalized paleogeography maps of Sunda shelf for 10 time slices from E Miocene (23 Ma) - Pleistocene. Maximum development of 'Proto-Mahakam' delta at ~15-12 Ma, at time of limited clastic deposition rates along N Borneo margin (major deltas here Late Miocene- Pliocene). (abbreviated version of Morley et al. 2016))

Morley, R.J., J. Teasdale & H.P. Morley (2024)- Southeast Asia tectonics, palaeogeography and palaeoclimate. Proc. GESGB-SEAPEX Asia Pacific Conference, Exploring Asia Pacific's Energy Future, London 2024, p. 15-16 *(Abstract only)*

Mubroto, B., Sartono & H. Wahyono (1993)- Sebaran arah kemagnetan purba di Indonesia, scale 1:5,000,000. Geological Research Development Centre (GRDC), Bandung.
('The distribution of ancient magnetism directions in Indonesia'. 1:5M scale map compilation of paleomagnetic directions data from Indonesia. Includes Birds Head paleolatitudes for Late Carboniferous Aimau Fm (47˚S), E Permian Aifat Fm (46˚S), Late Permian Ainim Fm (35˚S), and Late Triassic- Jurassic Tipuma Fm (42˚S))

Mukti, M.M., S. Aribowo & A. Nurhidayati (2018)- Origin of melange complexes in the Sunda and Banda arcs: tectonic, sedimentary, or diapiric melange. Proc. Global Colloquium on GeoSciences and Engineering, Bandung 2017, IOP Conference Series: Earth and Environmental Science 118, 012003, p. 1-5.
(online at: http://iopscience.iop.org/article/10.1088/1755-1315/118/1/012003/pdf)
(Brief review of possible different melange types of W Sumatra, Java, Timor. Remnants of Cretaceous subduction zone at Ciletuh, Luk Ulo and Meratus formed along S margin of Sundaland subduction and are known as tectonic melanges. Younger melange complexes in Sunda arc (Nias) and Banda arc (Timor) more likely diapiric melange)

Murphy, R.W. (1974)- Diversity of island arcs: Japan, Philippines, Northern Moluccas. Proc. SE Asia Petroleum Exploration Society (SEAPEX) 1, Singapore, p. 1-22.

Murphy, R.W. (1975)- Tertiary basins of Southeast Asia. Proc. SE Asia Petroleum Exploration Society (SEAPEX) 2, p. 1-36.
(46 basins, classified into four types: shelfal, continental margin, archipelagic and marginal seas)

Murphy, R.W. (1976)- Pre-Tertiary framework of Southeast Asia. SEAPEX Offshore South East Asia Conference, Singapore 1976, 3, p. 1-2. *(Abstract only)*

Murphy, R.W. (1987)- Southeast Asia: a tectonic triptych. In: M.K. Horn (ed.) Trans. 4th Circum Pacific Energy and Mineral Resources Conference, Singapore 1986, p. 395-400.
(SE margin of Eurasia has been compressional margin since Late Paleozoic, onto which dozens of arcs and microcontinents from Gondwanaland accreted. Map showing 10 Triassic-Recent magmatic arc systems. Late Cenomanian- E Turonian accretion of Meratus ophiolite cuts obliquely across older E-W trending arcs. Throughgoing wrench faults W of Sunda Strait right-lateral, those to E are left-lateral. Etc.)

Murphy, R.W. (1992)- Southeast Asia: linkage of tectonics, unconformities and hydrocarbons. In: M. Flower, R. McCabe & T. Hilde (eds.) Southeast Asia structure, tectonics and magmatism, Symposium Texas A&M University, College Station, p. 1-5. *(Extended abstract only)*

Murphy, R.W. (1998)- Southeast Asia reconstruction with a non-rotating Cenozoic Borneo. Bull. Geological Society Malaysia 42, p. 85-94.
(online at: https://gsmpubl.files.wordpress.com/2014/09/bgsm1998008.pdf)

(SE Asia reconstruction, modification of Hall (1996). Sunda and Philippine Sea plates treated as rigid blocks between 50-15 Ma. Borneo CCW rotation, required by paleomagnetic data, probably Late Cretaceous in age)

Murphy, R.W. (2002)- Southeast Asia reconstruction with a non-rotating Cenozoic Borneo. SEAPEX Press 5, 3, p. 30-41.
(Similar to paper above. Modified plate reconstruction of SE Asia between 50- 15 Ma. In this interpretation Sunda block and Philippine Sea Plate treated as relatively rigid blocks and Indochina extruded ~700km between 35- 15 Ma. Right-lateral movement along Sumatra Fault/ Andaman/Sagaing system is paired with left-lateral movement along Red River Fault and its precursor, West Baram Line. No large-scale CCW rotation of Borneo between 20-10 Ma, as suggested by Hall (1996) model)

Nagao, T. & S. Uyeda (1995)- Heat-flow distribution in Southeast Asia with consideration of volcanic heat. Tectonophysics 251, p. 153-159.
(SE Asia 2539 heat flow measurements, but contribution of heat flux from active volcanoes overlooked in regional heat-flow maps)

Musson R.M.W. (2012)- A provisional catalogue of historical earthquakes in Indonesia. British Geological Survey, (BGS) Open Report OR/12/073, Edinburgh, p. 1-21.

Nagao, T., S. Uyeda & O. Matsubayashi (1995)- Overview of heat flow distribution in Asia based on the IHFC compilation with special emphasis on South-east Asia. In: M.L. Gupta & M. Yamano (eds.) Terrestrial heat flow and geothermal energy in Asia, Balkema, Rotterdam, p. 221-238.

Nairn, A.E.M., L.E. Ricou, B. Vrielynck & J. Dercourt (1996)- The ocean basins and margins, vol. 8: Tethys. Plenum Press, New York, p. 1-530.
(Collection of papers dealing with tectonics, deposits, paleoenvironments of Permian- Eocene Tethys Ocean(s) belt, now consumed in Alpine- Himalayan- SE Asian foldbelts)

Nayoan, G.A.S. (1995)- East Indonesia Mesozoic geology: compilation of field data. In: The Mesozoic in the eastern part of Indonesia, Symposium, p. 1-9.

Nayoan, G.A.S., Arpandi & M. Siregar (1981)- Tertiary carbonate reservoirs in Indonesia. In: M.T. Halbouty (ed.) Energy Resources of the Pacific region, American Assoc. Petroleum Geol. (AAPG), Studies in Geology 12, p. 133-145.
(Overview of Mio-Pliocene carbonate distribution in Indonesia)

Netherwood, R. (2000)- The petroleum geology of Indonesia, overview of Indonesia's oil and gas industry. In: Indonesia 2000 Reservoir Optimization Conference, Jakarta, PT Schlumberger Indonesia, p. 174-227.
(Elegant overview of Indonesia Tertiary geology, basins and hydrocarbons)

Newcomb, K.R. & W.R. McCann (1987)- Seismic history and seismotectonics of the Sunda arc. J. of Geophysical Research: Solid Earth 92, B1, p. 421-439.
(Review of historic earthquake distribution over last 300 years along Sunda Arc, from Andaman Sea to Lesser Sunda Islands. Great interplate earthquakes occur near Sumatra, where age of youngest subducting Indian Ocean crust is 46 Ma: entire length of Sumatra has potential to produce great thrust earthquakes). In contrast, off Java and Lesser Sunda Islands, where oldest crust is 152 Ma, the subduction plate interface should be considered to have low seismic potential)

Nishimura, S. (ed.) (1980)- Physical geology of Indonesian island arcs. Kyoto University Publ., p. 1-230.

Nishimura, S. (1986)- Neotectonics of East Indonesia. Memoir of the Geological Society of China (Taiwan) 7, p. 107-124.

Nishimura, S. (1992)- Tectonic approach to changes in surface water circulation between the tropical Pacific and Indian Oceans. In: R. Tsuchi & J.C. Ingle (eds.) Pacific Neogene- environment, evolution and events. University of Tokyo Press, p. 157-167.
(SE Asia paleogeographic maps at 3, 17, 25 Ma)

Nishimura, S. & S. Suparka (1986)- Tectonic development of East Indonesia. J. Southeast Asian Earth Sciences 1, 1, p. 45-57.
(Outer non-volcanic arc in E Indonesia formed as a marginal part of the Australian continent in S hemisphere before Upper Jurassic. Timor and Sumba did not reach present positions until M Miocene or later. Ambonites on Wetar date time of collision between Australian Plate and proto- Banda Arc at 3 Ma, etc.)

Nishimura, S. & S. Suparka (1990)- Tectonics of East Indonesia. Tectonophysics 181, p. 257-266.
(Early models of tectonic evolution of E Indonesia, with reconstructions of 4 and 17 Ma)

Nishimura, S. & S. Suparka (1991)- Tectonic development of island-arc in Indonesian region. In: E.P. Utomo et al. (eds.) Proc. The Silver Jubilee LIPI- Symposium on the Dynamics of subduction and its products, Yogyakarta-Karangsambung 1991, Research and Development Center for Geotechnology (LIPI), Bandung, p. 20-34.

Nishimura, S. & S. Suparka (1997)- Tectonic approach to the Neogene evolution of Pacific-Indian Ocean seaways. Tectonophysics 281, p. 1-16.
(Mainly summary of activities of IGCP project 355. Paleomagnetic work on Sumatra suggests Sumatra was part of Gondwanaland in Triassic (off NW Australia), with paleolatitude close to 38°S and 62° CW rotation between Triassic and E Tertiary. Diagrammatic SE Asia reconstructions of 40, 25, 17 and 3 Ma, with implications for circulation of Indo-Pacific region. Neogene Indonesian seaway effectively closed in early M Miocene (17-15 Ma) and completely severed by ~6 Ma, preventing interchange between surface water of tropical Pacific and Indian oceans)

Noble, R.A., A. Argenton & C.A. Caughey (eds.) (2004)- Proc. International Geoscience Conference on deepwater and frontier exploration in Asia and Australasia, Jakarta 2004, Indonesian Petroleum Association (IPA), p. 1-545.

Norvick, M.S. (1979)- The tectonic history of the Banda Arcs, eastern Indonesia: a review. J. Geological Society, London, 136, 5, p. 519-527.
(Discussion of collision of Australian continent with East Sunda- Banda island arcs, back arc Banda Basin, back arc thrusting, etc. Banda Sea small marginal oceanic plate probably formed in E Tertiary as slices of N New Guinea were transported W with Pacific plate and collided with island arc in E Sulawesi. Present complexity result of late Miocene- E Pliocene collision and obduction of Banda Sea island arc system over leading edge of Australian- New Guinea continental plate)

Norvick, M.S. (2002)- The tectono-stratigraphic history of the northern margins of the Australian Plate from the Carnarvon Basin to Papua New Guinea. In: M. Keep & S. Moss (eds.) The sedimentary basins of Western Australia 3, Proc. West Australian Basin Symposium, Petroleum Exploration Society Australia (PESA), Perth, p. 963-964.

Nugraha, A.D., H.A. Shiddiqi, S. Widiyantoro, M. Ramdhan, W. Wandono, S. Sutiyono & T. Handayani (2014)- Teleseismic double-difference earthquake hypocenter relocation in the Indonesian region. American Geophysical Union (AGU), Fall Meeting, San Francisco, T53C-4709, p. *(Abstract and poster)*
(New relocations of 25,000 earthquake hypocenters in Indonesian region, using teleseismic double-difference relocation algorithm. Average epicenter relocation shift 6.2 km)

Nugraha, A.D., H.A. Shiddiqi, S. Widiyantoro, C.H. Thurber, J.D. Pesicek, H. Zhang, S. Wiyono, M. Ramdhan, Wandono & M. Irsyam (2018)- Hypocenter relocation along the Sunda Arc in Indonesia, using a 3D seismic-velocity model. Seismological Research Letters 89, 2A, p. 603-612.

(Relocation of hypocenters of 6000 earthquakes along Sunda Arc between April 2009 to May 2015 reveals more tightly defined Wadati-Benioff zone geometry at trench and back thrusts in offshore areas of Sumatra and Java)

Nugrahanto, K., A.M. Surya Nugraha, J. Chandra & A. Pradipta (2017)- Stratigraphy of eastern Indonesia. In: Petroleum systems of the Eastern Indonesia region- Guidance for hydrocarbon exploration in Eastern Indonesia, SKK Migas Memoir 1, Jakarta, p. 90-223.

Nugroho, H. (2005)- GPS velocity field In the transition from subduction to collision of the Eastern Sunda and Banda Arcs, Indonesia. Masters Thesis, Brigham Young University, Utah, p. 1-89.
(online at: http://scholarsarchive.byu.edu/cgi/viewcontent.cgi?article=1552&context=etd)
(GPS measurements from 14 sites in active E Sunda- Banda arc during 2001-2003. Most blocks move in same direction as Australian lower plate, but at different rates. Block boundaries may exist between Lombok and Komodo, Flores and Sumba, Savu and W Timor, and between Timor and Darwin. Timor Trough may account for 20 mm/yr of motion between Timor and Darwin. Major transverse fault off W Timor separates Savu/ Flores/ Sumba block from Timor/Wetar Block. Flores thrust moves E Sunda arc N relative to Asia, by decreasing amounts to W. Back-arc Wetar Thrust system takes up most of plate convergence between Australia and Asia)

Nugroho, H., R. Harris, A.W. Lestariya & B. Maruf (2009)- Plate boundary reorganization in the active Banda Arc-continent collision: insights from new GPS measurements. Tectonophysics 479, 1-2, p. 52-65.
(GPS velocities suggest three Sunda Arc-forearc regions, ~500 km long, with different amounts of coupling to Australian Plate. Movements relative to SE Asia increases from 21% to 41% to 63% E-ward. Regions bounded by deformation front to S, Flores-Wetar backarc thrust system to N and poorly defined structures on sides. Suture zone between NW Australian margin and Sunda-Banda Arcs still evolving with >20 mm/yr of movement measured across Timor Trough between Timor and Australia)

Nurusman, S. & S. Subono (1995)- Heat flow measurements in Indonesia. In: M.L. Gupta & M. Yamano (eds.) Terrestrial heat flow and geothermal energy in Asia, Oxford & IBH Publishing Co., Cornell University, p 145-162.

Okabe, A., T. Ohtaki, I. Purwana, S. Kaneshima & K. Kanjo (2004)- Surface wave tomography for Southeastern Asia using IRIS-FARM and JISNET data. Physics Earth Planetary Interiors 146, p. 101-112.
(Tomography data of SE Asia generally uses global seismic data. Japan-Indonesia Seismic NETwork (JISNET) seismic stations in C to W Indonesia used to better understand seismic structure of area. Claim better resolution data, but poorly illustrated: small, low resolution time slices, no cross sections)

Osagie, A.U. & I.A. Abir (2021)- Seismic tomographic imaging of P wave velocity perturbation beneath Sumatra, Java, Malacca Strait, Peninsular Malaysia and Singapore. J. Earth System Science (India) 130, 23, p. 1-13.
(online at: https://www.ias.ac.in/public/Volumes/jess/130/00/0023.pdf)
(P-wave tomographic imaging of crust down to 90 km around Sumatra, Java, Malacca Strait, Peninsular Malaysia and Singapore. Showing low-velocity anomalies that reflect accretion and possibly asthenospheric upwelling associated with subduction around Sumatra Subduction Zone. Prominent low-V anomaly trends SE beneath Sumatra and appears to have widest horizontal spread around 20 km depth). At this depth, it extends underMalacca Straits and parts of Peninsular Malaysia (heat anomaly?)

Otuka, Y. (1941)- Paleozoic geology of the East Indies. J. of Geography (Chigaku Zasshi) 53, 6, p. 249-264.
(online at: www.jstage.jst.go.jp/article/jgeography1889/53/6/53_6_249/_pdf)
(Old, brief review of Paleozoic outcrops in Indonesia; in Japanese)

Packham, G.H. (1990)- Plate motions and Southeast Asia: some tectonic consequences for basin development. Proc. 8th Offshore South East Asia Conference, Singapore, Southeast Asia Petroleum Exploration Society (SEAPEX) 9, OSEA 90175, p. 55-68.

Packham, G.H. (1993)- Plate tectonics and the development of sedimentary basins of the dextral regime in western Southeast Asia. In: B.K. Tan et al. (eds.) Proc. 7th Conference Geology Mineral Energy Resources of SE Asia (GEOSEA VII), Bangkok 1991, J. Southeast Asian Earth Sciences 8, p. 497-511.
(Present regime of oblique subduction in SE Asia initiated in M Eocene. Resulting dextral shear drove basin genesis and development. Effects identified from Malay Basin to C Thailand in East. Late Eocene-Oligocene phase formed rifts in C Sumatra, later spreading N to Mergui Basin and S to Sunda Basin. In Oligocene, dextral shear initiated Thailand basins and Malay Basin. Subsidence- extension continued until late M Miocene. Late Oligocene-E Miocene back arc basins subsidence extended out from initial rifts possibly due to withdrawal of heat beneath basins by cold subducted slab. Transpressional deformation started in Sumatra basins in M Miocene and continued through Late Miocene- Pliocene, resulting in uplift of Barisan Mts. Sumatra forearc transferred to Burma Plate with establishment of dextral Sumatra FZ in Pliocene)

Packham, G.H. (1996)- Cenozoic SE Asia: reconstructing its and reorganization. In: R. Hall & D. Blundell (eds.) Tectonic Evolution of Southeast Asia, Geological Society, London, Special Publ. 106, p. 123-152.
(Cenozoic SE Asia three major tectonic events: collision of India- Eurasia, rotational history of Philippine Sea plate and ongoing collision of Australia with E Indonesia. Models of Eocene India-Eurasia collision imply extrusion along major strike-slip faults or crustal thickening and block rotation)

Packham, G.H. & D.A. Falvey (1971)- An hypothesis for the formation of marginal basins in the western Pacific. Tectonophysics 11, 2, p. 79-109.
(Small ocean basins, or marginal seas, mainly located on W margin of Pacific Ocean. Tectonically they belong to Eurasian and Indo-Australian crustal plates to W and are bounded on E side by island arc-trench systems. Basins generally reach normal oceanic depths, but also contain seamounts, linear seamount chains and areas of submerged continental crust (rises). No evidence of mid-ocean ridge systems. Marginal basins also characterized by high regional gravity anomalies, high heat flow and linear magnetic anomalies. Geological data suggest formation of marginal seas by rifting of volcanic arc from adjacent continent, possibly by generation of oceanic crust by mantle upwelling immediately behind andesitic island arc, producing asymmetrical seafloor spreading. In Indonesian region: Andaman Sea, Sulu Sea, Celebes Sea, Banda Sea, and South China Sea basins)

Packham, G., D.A. Falvey & R.D. Shaw (1991)- Southeast Asia Tectonics. Petroconsultants, Non-exclusive multi-client Report, p. . *(Unpublished)*

Panggabean, D.R., L.D. Setijadji & I.W.Warmada (2011)- Variability of heavy minerals in quartz sand deposited within Mesozoic granitoid belt in Western Indonesia. Proc. Joint 36th HAGI and 40th IAGI Annual Conv., Makassar, JCM2011-444, p. 1-13.
(online at: https://www.iagi.or.id/web/digital/10/2011_IAGI_Makassar_Variability-of-Heavy-Minerals.pdf)
(Different heavy mineral assemblages from Mesozoic granites of Sumatera (Sibolga, Tanjung Balai), Bangka (n casiterite, ilmenite, wolframite, zircon, allanite and xenotime; S-type granite) and Kalimantan. Sibolga with magnetite, chalcopyrite, gold, ilmenite, and allanite. Tanjung Balai with magnetite, chalcopyrite, and hematite. Etc. With overview of Mesozoic granites in W Indonesia)

Panggabean, D.R., L.D. Setijadji & I.W. Warmada (2013)- Study on heavy minerals composition in quartz sand derived from Mesozoic granitoid in Western Indonesia. Proc. Joint Convention 38th Indonesian Association Geophysicists (HAGI) - 42nd Indonesian Association Geologists (IAGI), Medan, JCM2013-0122, p. 1-5.
(online at: https://www.iagi.or.id/web/digital/8/2013_IAGI_Medan_Study-on-Heavy-Minerals.pdf)
(Mainly on heavy minerals from samples around Mesozoic granitoids of N Sumatra (Sibolga (~264 Ma; M Permian) and Tanjung Balai; both magnetite- hematite- chalcopyrite dominated), Bangka (Triassic; cassiterite-wolframite-ilmenite dominated) and C Kalimantan (Kuala Kurun; magnetite-chalcopyrite-ilmenite-dominated))

Panggabean, H., D. Sukarna & E. Rusmana (2007)- The introduction of regional Cretaceous geology in Indonesia. In: Lee I.Y. et al. (eds.) 2nd Int. Symposium Paleoclimates in Asia during the Cretaceous, Int. Geosciences Program (IGCP) Project 507, Seoul 2007, Contr. 1, p. 79-97.

Park, Y, P. Maffre, Y. Godderis, F.A. Macdonald, E.S.C. Antilla & N.L. Swanson-Hysell (2020)- Emergence of the Southeast Asian islands as a driver for Neogene cooling. Proc. National Academy of Sciences USA (PNAS) 117, 41, p. 25319-25326.
(online at: https://www.pnas.org/doi/epdf/10.1073/pnas.2011033117)
(Ongoing arc–continent collision between Sunda-Banda arc system and Australia increased area of exposed land and silica weathering since M-Miocene. Concurrently, Earth's climate cooled since M Miocene Climatic Optimum (~15 Ma). Emergence of SE Asian islands possibly played role in driving this cooling trend)

Patra Nusa Data (PND) (2006)- Indonesia Basin Summaries. Patra Nusa Data, Jakarta, p. 1-466.
(Overview of Indonesia sedimentary basins. Classified by maturity for petroleum exploration into mature (14), semi-mature (9) and frontier (18) basins)

Patria, A. (2022)- Earthquake geology of the large left-lateral strike-slip fault system at the Pacific and Australian Plate margin, Eastern Indonesia. Doctoral Thesis Graduate School of Science and Engineering, Doshisha University, Japan, p. 1-136.
(online at: https://doshisha.repo.nii.ac.jp/record/29236/files/zk1250.pdf)
(Pacific plate rapidly slips W-ward at rate of ~120 mm/yr relative to Australian plate. W-ward motion resulted in left-lateral slip of ~80 mm/yr across N part of E Indonesia. Slip accommodated by large left-lateral strike-slip fault systems, extending from NW Papua to NE Sulawesi. With detailed studies of Palu-Koro- Matano Fault zone in Sulawesi and N Banda Arc (Seram-Ambon) area. Some of left-lateral slip in E Indonesia accommodated by Papua fold-thrust Belt. Etc.)

Paul, D.D. & H.M. Lian (1975)- Offshore Tertiary basins of Southeast Asia, Bay of Bengal to South China Sea. Proc. 9th World Petroleum Conference, Tokyo, 3, p. 107-121.

Peck, J.M. & B. Soulhol (1986)- Pre-Tertiary tensional periods and their effects on the petroleum potential of Eastern Indonesia. Proc. 15th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, p. 341-369.

PERTAMINA (1986)- The geology and exploration history of the oil basinal areas in Indonesia. Schlumberger Formation Evaluation Conference, Indonesia, 1986, p. 1-67.

PERTAMINA/BEICIP (1978)- Petroleum potential of Western Indonesia. Multi-client study, 137p. *(Unpublished)*

PERTAMINA/BEICIP (1982)- Petroleum potential of Eastern Indonesia. Multi-client study, 226p. + Atlas. *(Unpublished)*

PERTAMINA/BEICIP (1985)- Hydrocarbon potential of Western Indonesia, Multi-client study, 2nd Ed., 239p. + Atlas *(Unpublished)*

PERTAMINA & BEICIP-FRANLAB (1995)- Regional seismic profiles through Indonesian basins. Multi-client study, p. 148-196.

PERTAMINA-BEICIP-FRANLAB (1992)- Global geodynamics, basin classification and exploration play types in Indonesia. Multi-client study, Vol. I (plates 1-135), Vol. II (plates 136-270) *(Unpublished)*

PERTAMINA-BEICIP-FRANLAB (1996)- Global geodynamics, basin classification and exploration play types in Indonesia, Multi-client study, Vol. 3 Addendum, 43 plates *(Unpublishedy)*.

PERTAMINA/CORE LAB (1998)- The petroleum geology and hydrocarbon potential of the foreland basin areas of Irian Jaya and Papua New Guinea. Multi-client study, 4 volumes. *(Unpublished)*

PERTAMINA/SPT Simon Petroleum Technology (1992)- Eastern Indonesia: biostratigraphy, geochemistry and petroleum geology. Multi-client study, p. *(Unpublished)*

Peters, S.G. (2007)- The distribution of major copper deposits in the Southeast Asia region. Proc. 42nd Session Committee Co-ord. Joint Prospecting Mineral Resources in Asian Offshore Areas (CCOP), Beijing 2005, 2, p. 55-59.
(online at: www.ccop.or.th/download/pub/42as_ii.pdf)

Petersen, M., S. Harmsen, C. Mueller, K. Haller, J. Dewey et al. (2007)- Documentation for the Southeast Asia seismic hazard maps. U.S. Geological Survey Admin. Report, p. 1-67.
(online at: http://earthquake.usgs.gov/hazards/products/images/SEASIA_2007.pdf)

Petroconsultants Australasia (1991)- Southeast Asian tectonics. Book + maps *(Unpublished multi-client study, authored byG. Packham & R. Shaw)*

Peucker, E.B. & M.W. Miller (2004)- Quantitative bedrock geology of East and Southeast Asia (Brunei, Cambodia, eastern and southeastern China, East Timor, Indonesia, Japan, Laos, Malaysia, Myanmar, North Korea, Papua New Guinea, Philippines, Far-eastern Russia, Singapore, South Korea, Taiwan, Thailand, Vietnam). Geochem. Geophysics Geosystems 5, 1, Q01B06, p. 1-8.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2003GC000619)
(Quantitative analyis the area-age distribution of sedimentary, igneous and metamorphic rock outcrops, based on 1997 CCOP digital surface geology maps of E and SE Asia. Surface exposures of sedimentary rocks 73.3%, volcanic rocks 8.5%, plutonic rocks 8.8%, ultramafic rocks 0.9% and metamorphic rocks 8.6%)

Pigram, C.J. & H. Panggabean (1984)- Rifting of the northern margin of the Australian continent and the origin of some microcontinents in Eastern Indonesia. Tectonophysics 107, 3-4, p. 331-353.
(online at: https://www.academia.edu/81506484/Rifting_of_the_northern_margin_of_the_Australian_continent_and_the_origin_of_some_microcontinents_in_Eastern_Indonesia)
Classic paper linking New Guinea Jurassic-Cretaceous rift-drift stratigraphy to E Indonesian microcontinents like Buton, Buru-Seram and Banggai-Sula. New Guinea N margin rifting began at ~230 Ma. Onset of seafloor spreading (marked by post-breakup unconformity) ranges in age from 185 Ma in PNG to 170 Ma in Irian Jaya and continues to young in SW direction along W margin of Australian continent, reflecting opening of Indian Ocean off W Australia. By end Jurassic N margin of Australian continent faced seaway which linked proto-Indian and Proto-Pacific oceans, which was separated from pre-existing Neo-Tethys and Panthalassa oceans by microcontinents, now preserved in E Indonesia. Banggai-Sula and Buton rifted off PNG side of margin, Birds Head closer ties to N Queensland, NE Australia)

Prasetyo, H. (1995)- Structural and tectonic development of Eastern Indonesia. In: J. Ringis (ed.) Proc. 31st Session Committee Co-ord. Joint Prospecting Mineral Resources in Asian Offshore Areas (CCOP), Kuala Lumpur 1994, 2, p. 204-232.
(online at: https://repository.unescap.org/server/api/core/bitstreams/4198bc42-86c9-49fe-843e-60aebea03e54/content)
(Review of East Indonesia Cenozoic tectonics- anno 1995)

Prawirodirdjo, L. & Y. Bock (2004)- Instantaneous global plate motion model from 12 years of continuous GPS observations. J. of Geophysical Research 109, B08405, p. 1-15.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2003JB002944)
(Global plate motion model for 17 major and minor tectonic plates from 106 GPS stations)

Price, N.J. & M.G. Audley-Charles (1983)- Plate rupture by hydraulic fracture resulting in overthrusting. Nature 306, 5943, p. 572-574.
(Early paper on 'plate rupture' (= slab breakoff) under Timor during Late Miocene- E Pliocene collision of Australian continental lithoshere and trench of Banda Arc, leading to uplift of 'outer Banda Arc')

Price, N.J. & M.G. Audley-Charles (1987)- Tectonic collision processes after plate rupture. Tectonophysics 140, p. 121-129.

(online at: http://searg.rhul.ac.uk/pubs/price_audley-charles_1987%20banda%20slab%20breakoff.pdf)
(Rupture of continental plate subducting below forearc produces fold-thrust mountain belt with fast overthrusting of nappes. Post-rupture plate unflexing provides mechanism for foreland basin formation. Accounts for origin of Timor Trough, its imbrication and contemporaneous extension in outer arc, as well as reversal of subduction direction after emplacement of nappes)

Prouteau, G. (1999)- Contribution des produits de fusion de la croute oceanique subductee au magmatisme d'arc: exemples du Sud-Est Asiatique et approche experimentale. Doct. Thesis Universite de Brest, p. 1-264.
('Contribution of slab melts to arc magmatism: examples from South-East Asia and experimental approach'. Adakitic magmas product of melting of basaltic oceanic crust. Examples from Philippines and Borneo)

Pubellier, M., N. Chamot-Rooke, F. Ego et al. (2008)- Structural map of Eastern Eurasia; evolution of structural blocks and tectonic belts through time. Commision Geologic Map of the World, scale 1:12.500.000, 1p.
(map online at: www.academia.edu/55861254/Structural_map_of_Eastern_Eurasia_Scale_1_12_500_000?uc-sb-sw=4746815)

Pubellier, M. (2013)- Re-exploring the formation processes of SE Asian Basins, from rifting to mountain belts. Proc. National Geoscience Conference (NGC 2013), Ipoh Geological Society Malaysia, p. 5-7. *(Extended Abstract)*
(online at: www.gsm.org.my/products/702001-101658-PDF.pdf)
(Discussion of diachronous opening of Tertiary marginal basins along E part of the Sundaland: (1) Proto S China Sea and S China Sea (with rifted off continental Palawan Block), (2) NW Sulu Sea, separated by Cagayan Arc; (3) late E Miocene Sulu Sea back-arc basin (W Mindanao and Sulu arc continental basement); (4) M Eocene Celebes Sea basin (N Arm of Sulawesi), Late Miocene N Banda Basin, Pliocene S Banda Basin. Basin closures started in E Miocene)

Pubellier, M., J. Ali & C. Monnier (2003)- Cenozoic plate interaction of the Australia and Philippine Sea Plates: "hit-and-run" tectonics. Tectonophysics 363, 3-4, p. 181-199.
(online at: https://www.academia.edu/download/31505493/Pubellier-et-al-2003-Tectonophys.pdf)
(NW New Guinea at least two marginal basins, both formed in back-arc settings. Older basin opened between M Jurassic- E Cretaceous, a remnant of which is now preserved as New Guinea Ophiolite. Its obduction started at 40 Ma and finally emplaced on Australian margin at ~30 Ma. Younger basin active in Oligocene- M Miocene and obducted in E Pliocene. W edge of Philippine Sea also hitherto unexplained Oligocene deformation of Philippine arc. Extensive area of oceanic crust extended Australian Plate N of craton. As Australia began N-ward drift in E Eocene, this lithosphere was subducted. Thus, portion of Philippine Sea Plate carrying Taiwan-Philippine Arc to present site may have actually been in contact with ophiolite now in New Guinea and obduction led to deformation of Philippine Sea Plate. Neogene Plate kinematics transported deformed belt in contact with Sunda block in Late Miocene-Pliocene)

Pubellier, M., A. Deschamps, A. Loevenbruck et al. (2001)- How plate kinematics creates and sweeps away supra subduction ophiolites? EOS Transactions AGU, 82, 47, Fall Meeting Suppl. *(Abstract only)*

Pubellier, M. & F. Ego (2004)- Geodynamic terrane map of Asia. Commision Geological Map of the World and UNESCO.
(Geodynamic map of Asia from eastern Europe to SE Asia. Asian continent has grown from Siberian nucleus by successive accretions of continental blocks of various sizes. Blocks originated from from rifted Gondwana margin at several times in Paleozoic, and amalgamated with the northern continent between Devonian and Tertiary)

Pubellier, M., F. Ego, N. Chamot-Rooke & C. Rangin (2003)- The building of pericratonic mountain ranges: structural and kinematic constraints applied to GIS-based reconstructions of SE Asia. Bull. Societe Geologique France 174, 6, p. 561-584.
(online at: www.geologie.ens.fr/~rooke/NCRpdf4web/Pubellier&al-2003.pdf)

(Nice set of Indonesia-scale geological cross-sections and reconstructions at 2, 4, 6, 10, 15 and 20 Ma; part of DOTSEA project. Mamberamo Basin shown as Miocene back-arc basin above S-ward subducting Caroline Plate, etc.)

Pubellier, M. & F. Meresse (2013)- Phanerozoic growth of Asia; geodynamic processes and evolution. J. Asian Earth Sciences 72, p. 118-128.
(online at: www.academia.edu/5211595/Phanerozoic_growth_of_Asia_Geodynamic_processes_and_evolution)
(On mechanism of Tertiary accretion processes in SE Asia. Early stages illustrated in E Sunda arc where subduction of Sunda Trench is blocked in Sumba and Timor region, and flipped into Flores Trough. Another stage, where part of upper plate basin has disappeared is in Celebes Sea (and Makassar Basin?). Next stage is consumption of marginal basin where both margins collide and accretionary wedge is thrust over margin, as in NW Borneo and Palawan. These events predate arrival of conjugate margin of large ocean, which marks beginning of continental subduction as observed in Himalaya-Tibet region. Closure generally diachronous through time. Ophiolite obducted in such context generally of back-arc origin rather than relict of vanishing large ocean, which is rarely preserved)

Pubellier, M., C. Monnier, R. Maury & R. Tamayo (2004)- Plate kinematics, origin and tectonic emplacement of supra-subduction ophiolites in SE Asia. Tectonophysics 392, p. 9-36. *(online at: www.academia.edu/5211614/Plate_kinematics_origin_and_tectonic_emplacement_of_supra_subduction_ophiolites_in_SE_Asia)*
(Majority of SE Asia ophiolites originated in backarc or island arc settings along edge of Sunda (Eurasia) and Australian cratons, or within Philippine Sea Plate. Ophiolites accreted to continental margins during Tertiary. Relatively 'autochthonous ophiolites' resulted from shortening of marginal basins like S China Sea or Coral Sea, and 'highly displaced ophiolites' developed in oblique convergent margins. Some ophiolites in front of Sunda plate represent supra-subduction zone basins formed along Australian Craton margin in Mesozoic)

Pubellier, M. & C.K. Morley (2014)- The basins of Sundaland (SE Asia): evolution and boundary conditions: J. Marine and Petroleum Geology 58, B, p. 555-578. *(online at: www.academia.edu/10231429/The_Basins_of_Sundaland_SE_Asia_evolution_and_boundary_conditions)*
(Major review of origin and evolution of Cenozoic basins of Sundaland. All basins in supra-subduction setting, but many different types, rift basins most widespread. Rift basin initiation is diachronous, with basins >45 Ma developing in E, and <45 Ma in C and N Sundaland, due to earlier onset of subduction rollback in Sulawesi-Celebes Sea area. Andean margin growth in NW Sundaland, Proto-South China Sea slab-pull and Andean margin collapse in NE Sundaland)

Pubellier, M., C. Rangin, X. Le Pichon and DOTSEA Working Group (2005)- DOTSEA Deep offshore tectonics of South East Asia: a synthesis of deep marine data in Southeast Asia. Memoires Societe Geologique France, n.s., 176, p. 1-32. *(+ many maps and figures on CD)*.
(SE Asia kinematic reconstructions back to 20 Ma, mainly driven by restoring plate motions from present-day GPS data. Rel. detailed maps and discussion of E Sunda margin (Philippines to N Sulawesi), S Sunda margin (Sumatra forearc) and S China Sea- Vietnam margin)

Pulunggono, A. (1976)- Tertiary carbonates distribution and oil potential in Indonesia. Proc. Carbonate Seminar Jakarta 1976, Indonesian Petroleum Association (IPA), Special Volume, p. 6-13.

Pulunggono, A. (1985)- The changing pattern of ideas on Sundaland within the last hundred years, its implications to oil exploration. Proc. 14th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, 1, p. 347-378.
(History of Sundaland tectonic interpretations from 1800s- 1970s. Sundaland is mosaic of microplates, initially accreted in Late Triassic. Zone of weakness between rigid microplates in Sumatra locus of extensional tectonism, high heat flow and subsequent compression, which led to optimum conditions for generation and trapping of Tertiary oils)

Purnomo Prijosoesilo, Y. Sunarya & A. Wahab (1993)- Recent progress of geological investigations in Indonesia. J. Southeast Asian Earth Sciences 8, 1-4, p. 5-23.
(Generic overview of Indonesian mineral resources, hydrocarbons, geothermal prospects, etc.)

Purwaningsih, R.E.Y., A, Sekarsaria, T. W. Sari, C. Pratam & S.T. Wibowo (2022)- Active tectonics of the Eastern Java based on a decade of recent continuous geodetic observation. Geodesy and Geodynamics 13, 4, p. 376-385.
(online at: www.sciencedirect.com/science/article/pii/S1674984722000210)
(Present-day strain in E Java mainly compression strain, due to Sunda subduction zone. However, highest compression estimated in NE part of Java to Madura Strait, which might indicate local fault activity)

Puspito, N.T. & K. Shimazaki (1995)- Mantle structure and seismotectonics of the Sunda and Banda arcs. Tectonophysics 251, p. 215-228.
(Subducted slab morphology from tomography and seismicity of Sunda-Banda Arc suggests three zones: (1) W Sunda (Sumatra), with slab-like image penetrating to ~500 km below W Sunda arc, but no seismicity below 250 km; (2) E Sunda (Java-Flores), with seismic gap between 300-500 km, but slab continuous and penetrating into lower mantle; and (3) Banda arc, with seismicity down to ~650 km, slab dips gently and does not penetrate into lower mantle. Along back-arc side of Sunda- Banda arcs heat flow decreases from W to E)

Puspito, N.T., Y. Yamanaka, T. Miyatake, K. Shimazaki & K. Hirahara (1993)- Three-dimensional P-wave velocity structure beneath the Indonesian region. Tectonophysics 220, p. 175-192.
(Early P-wave seismic tomography imaging study of Indonesian region)

Putra, A.F. & S. Husein (2019)- Regional overview of orogenic belts in Indonesia: emphasis on the occurrences of thrust wedge systems. Berita Sedimentologi 45, p. 19-41.
(online at: https://journal.iagi.or.id/index.php/FOSI/article/view/65/36)
(Review of thrust wedge systems in Indonesia: Langsa (N Sumatra Basin), Banyumas (W Central Java), Kutei Basin, W Sulawesi (Lariang-Karama Basins and Makassar Straits), Offshore N Banggai Sula, Misool-Onin-Kumawa Ridge, Berau-Bintuni Basins, and Lengguru. Pliocene-Recent critical time for orogenesis. May be associated with strike-slip faults (Sumatran Fault, Palu-Koro, Balantak and Tarera-Aiduna) acting in response to slip partitioning. Thrust wedge systems in both subduction and collisional tectonics)

Rachman, M.G. & A.A. Shah (2026)- Satellite image-based structural mapping reveals new earthquake sources in eastern Indonesia: implications for active tectonics and earthquake hazards. NPJ Natural Hazards (Nature) 3, 16, p. 1-27.Nature npj Natural Hazards
(online at: https://www.nature.com/articles/s44304-026-00180-0.pdf)
(Extensive reviewof E Indonesia structure. Extension regionally pervasive fromBanda Sea into Lombok-Seram fold-thrust belt, Aru Trough and Bird's Neck of New Guinea. Kinematic indicators indicate NW–SE-directed extension driven by oblique Australia-Pacific plate convergence, producing transtension across Sulawesi, Seram–Buru, and Aru Trough. In contrast, Timor-Seram-Tanimbar frontal system relatively aseismic. E Indonesia best described as obliquely convergent plate boundary with distributed transtension, rather than a system governed by simple slab rollback)

Raghuram, G., F.A. Capitanio & M. Radhakrishna (2018)- Flexural analysis along the Sunda Trench: bending, buckling and plate coupling. Tectonics 37, 10, p. 3524-3544.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2017TC004926)
(Modeling of flexural bending of subducting Indian Ocean- Australian Plate at Sunda Trenck off Sumatra and Java, from gravity, bathymetry, seismic data, sediment thickness, seafloor age, etc. Significant variation in flexural properties along trench.)

Ramdhan, A.M. & S. O'Connor (2022)- Generation and estimation of overpressure from wireline logs using deterministic approaches in western Indonesia's Tertiary sedimentary basins. Petroleum Geoscience 28, 3, p. 1-36.

(manuscript online at: https://www.researchgate.net/publication/359453928_Generation_and_estimation_of_overpressure_from_wireline_logs_using_deterministic_approaches_in_western_Indonesia's_Tertiary_ Etc.)
(Many basins in Indonesia, such as N Sumatra, S Sumatra and Lower Kutai, are highly overpressured, causing drilling problems. Density log can determine contributions of loading and unloading)

Rangin, C. (2018)- The western Sunda basins and the India /Asia collision: an atlas. Geotecto Consulting, Paris, (Societe Geologique de France), p. 1-294.
(for sale at: https://www.geosoc.fr/boutique-en-ligne/beaux-livres/the-western-sunda-basins-and-the-india-asia-collision-an-atlas-detail.html)
(Atlas documenting tectonic processes related to oblique convergence between India and Sunda continents, along Bay of Bengal active E margin, from E Himalaya Syntaxis and N Sumatra, from 30° N to Equator)

Rangin, C. (1990)- South-East Asian marginal basins (South China Sea, Sulu and Celebes Seas): new data and interpretations. In: X. Jin et al. (eds.) Proc. Symposium Recent contributions to the geological history of the South China Sea, Hangzhou 1990, p. 38-51.
(online at: https://epic.awi.de/38705/2/south-china-sea_1990.pdf)
(Celebes and S China Seas rifted from Asian continental margin in Paleogene. Proto-S China Sea probably same origin, but now completely subducted. Basins resulted partly from Indo-Asian collision and partly from slab-pull forces along Sunda Trench. Neogene collision of Banggai Sula Block with S margin of Celebes Sea in Sulawesi forced progressive closure of basins. Proto S China Sea was first to subduct below Cagayan Ridge in E Neogene, inducing opening of Sulu Sea and spreading reorganisation in S China Sea. Following collision of Cagayan Ridge with rifted margin of S China Sea in E Miocene, Sulu Sea initiated subduction along Sulu Archipelago and Celebes Sea along N Sulawesi Trench. Paleogene was period of stretching of Eurasian margin and opening of marginal basins, in Neogene mainly progressive subduction of these oceanic basins)

Rangin, C. (1994)- Tectonics of Cenozoic sedimentary basins in SE Asia. In: F. Roure, N. Ellouz, S. Shein & I. Skvortsov (eds.) Int. Symposium Geodynamic evolution of sedimentary basins, Moscow, p. 351-367.

Rangin, C. (2015)- Coeval Oligocene- Miocene extension in East Andaman Basin/ North Sumatra region and in the South China Sea: geodynamic consequences and implications for hydrocarbon research. Presentation AAPG Workshop Tectonic evolution and sedimentation of South China Sea region, Kota Kinabalu 2015, AAPG Search and Discovery Article 30408, p. 1-21.
(online at: www.searchanddiscovery.com/documents/2015/30408rangin/ndx_rangin.pdf)
(Both West and East Sunda block margins affected by Late Eocene- E Miocene continental crust thinning just before E Neogene impingement of Philippine Mobile Belt and Indian Ridges. This extension was controlled by subduction retreat along Sumatra Java trench and its E extension in C Sulawesi. Early M Miocene (15 Ma) multiple collisions around S China Sea (Banggai Sula- E Sulawesi, Mindanao Zamboanga microcontinent-Philippine Mobile Belt, Mindoro Palawan- Philippine Mobile Belt, Luzon-Taiwan), causing end of spreading in Sulu and S China Seas)

Rangin, C., L. Jolivet, M. Pubellier and Tethys working group (1990)- A simple model for the tectonic evolution of Southeast Asia and Indonesia region for the past 43 m.y. Bull. Societe Geologique France (8), 6, p. 889-905.
(online at: https://www.researchgate.net/publication/261438118_A_simple_model_for_the_tectonic_evolution_of_southeast_Asia_and_Indonesian_region_since_43_my)
(Set of paleotectonic reconstructions since M Eocene (43 Ma), showing steps in convergence of Sundaland, Philippine Sea Plate and Australia-New Guinea plate)

Rangin, C., X. Le Pichon, S. Mazzotti, M. Pubellier, N. Chamot-Rooke, M. Aurelio, A. Walpersdorf & R. Quebral (1999)- Plate convergence measured by GPS across the Sundaland/ Philippine Sea Plate deformed boundary: the Philippines and eastern Indonesia). Geophysical J. International 139, p. 296-316.
(online at: https://academic.oup.com/gji/article/139/2/296/553031)
(W boundary of Philippine Sea Plate (PH) wide deformation zone that includes stretched continental margin of Sundaland, Philippine Mobile Belt and continental blocks around PH-Australia-Sunda triple junction. 80% of

PH-Sunda convergence absorbed in Molucca Sea double subduction system and <20% along continental margins of N Borneo. In triple junction between Sundaland, PH and Australia plates, from Sulawesi to Irian Jaya, preferential subduction of Celebes Sea induces CW rotation of Sulu block, which is escaping toward Celebes Sea from E-ward-advancing PH Plate. Undeformed Banda block rotates CCW with respect to Australia and CW with respect to Sundaland. Kinematics of this block enabled to compute rates of S-ward subduction of Banda block in Flores Trench and E-ward convergence of Makassar Straits with Banda block. Deformation compatible with E-ward motion of Sundaland with respect to Eurasia determined by GEODYSSEA, not with assumption that Sundaland belongs to Eurasia)

Rangin, C. & M. Pubellier, N. Chamot-Rooke, H. Bijwaard & W. Spakman (2000)- Late Cenozoic reconstructions in SE Asia; new GPS and tomographic constraints. AAPG International Conference and Exhibition, Bali 2000, Article 90913, p. 1. *(Abstract)*
(online at: https://www.searchanddiscovery.com/abstracts/html/2000/intl/abstracts/334.htm)
(Most Cenozoic marginal basins floored with oceanic crust and fringing Sundaland to E are presently subducting, and sedimentary basins are inverted. Subduction and basin contraction are associated with collision of Australian and Philippine Sea plates with Sundaland (SU) since the Miocene. Etc. (see also Rangin et al., 1999))

Rangin, C., M. Pubellier, J. Azema, A. Briais, P. Chotin, H. Fontaine, P. Huchon, L. Jolivet, R. Maury, C. Muller, J.P. Rampnoux, J.F. Stephan, J. Tournon et al. (1990)- The quest for Tethys in the western Pacific; eight paleogeodynamic maps for Cenozoic time. Bull. Societe Geologique France (8), 6, p. 907-913.
(Eight geodynamic reconstructions maps in color for Early Tertiary- Present. 35 distinct crustal blocks distinguished. All marginal basins opened in Cenozoic, after complete closure of Tethys. Final Tethys suture traced from S Sumatra-C Java, Meratus Range in Borneo to W Philippines)

Rangin, C., M. Pubellier, N. Chamot-Rooke, C. Vigny, X. Le Pichon, M. Aurelio & R. Quebral (1998)- Quantative estimation of plate convergence across the Sundaland/Philippine Sea boundary from GPS results. In: P. Wilson & G.W. Michel (eds.) The geodynamics of S and SE Asia (GEODYSSEA) Project. Scientific Technical Report STR/14, Geoforschungszentrum, Potsdam, Germany, p. 206-225.
(Convergence between Sundaland and the Philippine Sea Plate is absorbed across a 600km wide zone, including the strtched Eurasian continental argin, the Philippine Mobile Belt from Luzon to the Molucca Se, and the mosaic of continental blocks jammed in the PSP/ Australia/ Sunda triple junction. Etc.)

Rangin, C., M. Pubellier & L. Jolivet (1989)- Collision entre les marges de l'Eurasie et de l'Australie: un processus de fermeture des bassins marginaux du Sud-Est Asiatique. Comptes Rendus Academie Sciences, Paris 309, p. 1223-1229.
('Collision between the margins of Eurasia and Australia: a process of closing of marginal basins of SE Asia'. Convergence between Philippine Sea and Indo-Australian plates interpreted as E-M Miocene collision between two thinned continental margins with marginal basins floored by oceanic crust. This 'soft collision' initiated progressive subduction and closure of these basins and predate 'hypercollision' between Eurasia and Australia. So-called 'exotic fragments' also include Timor and Seram as parts of thinned continental margins of Eurasia and Australia respectively)

Rangin, C., W. Spakman, M. Pubellier & H. Bijwaard (1999)- Tomographic and geological constraints on subduction along the eastern Sundaland continental margin (South-East Asia). Bull. Societe Geologique France 170, 6, p. 775-788.
(Tomographic model suggests rel. continuous active margin from Taiwan to Java before collision of Banda Block with Sundaland in M Miocene. N-dipping slab below Timor- Banda Arc reflects new subduction after this collision (12- 0 Ma). Shortening within Sunda Block accommodated by subduction of SE Asia marginal basins that opened in Paleogene. Closure of Sulu and Celebes basins is recent, whereas subduction of Proto-South China Sea marked by 300 km long slab below Borneo)

Ranneft, T.S.M. (1972)- The effects of continental drift on the petroleum geology of W Indonesia. Australian Petroleum Exploration Assoc. (APEA) Journal 2, p. 55-63.

Richards, S., G. Lister & B. Kennett (2007)- A slab in depth: three-dimensional geometry and evolution of the Indo-Australian Plate. Geochem. Geophysics Geosystems 8, 12, Q12003, p. 1-11.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2007GC001657)
(3D image of subducted Indo-Australian plate below SE Asia and show geometry of subducted slab at depth is related to geometric evolution of SE Asia over past 50 Ma. Once semi-continuous subducting Indo-Australian plate segmented during collision between India, Australia and subduction margin to N. Complexities and evolution of subducted plate manifest in evolution of overriding plate)

Richter, B.W. (1996)- The Tertiary tectonic evolution of Southeast Asia; insights from paleomagnetism and plate reconstructions. Ph.D. Thesis, University of California, Santa Barbara, p. 1-247. *(Unpublished)*
(Paleomagnetic studies of parts of mainland SE Asia. Shan Plateau of Myanmar 33± 8° CW rotation relative to S China Block since M Cretaceous= 15.4 ± 5.4 ° CW rotation relative to Indochina Block. Peninsular Malaysia CCW declinations, similar to Borneo, Celebes Sea and Sulawesi, supporing hypothesis that much of Sundaland region rotated 35-40° CCW as rigid block since M Cretaceous. Java-Australia boundary probably passive margin until M Oligocene, so N-ward movement of Australia since Late Eocene initially pushed Borneo N-ward, driving CCW rotation of Borneo and Malaysia. Philippine Sea Plate rotating CW and moving NW through much of Tertiary, and arc fragments of this plate collided with Borneo through Tertiary)

Richter, B. & M. Fuller (1996)- Palaeomagnetism of the Sibumasu and Indochina blocks- implications for the extrusion tectonic model. In: R. Hall & D.J. Blundell (eds.) Tectonic evolution of Southeast Asia, Geological Society, London, Special Publ. 106, p. 203-224.
(Paleomagnetic data implications for extrusion tectonic model: (1) Sundaland only rotated 25-30° CW relative to S China during Tertiary; (2) SE-ward translation only 300-500 km; and (3) Sundaland composed of smaller sub-blocks, some of which moved N. This indicates deformation of Sibumasu dominated by oblique Indian Ocean Plate subduction, while deformation of Indochina dominated by extrusion, driven by Indian Craton)

Richter, B., I. Norton, E. Schmidtke & M. Fuller (1992)- Paleomagnetic rotations from Southeast Asia- implications for tectonic reconstructions of Sundaland. In: M. Flower et al. (conv.) Southeast Asia structure, tectonics and magmatism, Texas A&M University Symposium, College Station 1992, p. 1-3. *(Abstract only)*
(Paleomagnetic data from Thailand- E Myanmar suggest ~45° CW rotation since Cretaceous. Peninsular Malaysia, Borneo, SW Sulawesi and Celebes Sea mainly CCW declinations)

Ritsema, A.R. (1952)- Over diepe aardbevingen in de Indische Archipel. Ph.D. Thesis University of Utrecht, p. 1-132. *(Unpublished)*
('About deep earthquakes in the Indies Archipelago'. Study of 22 intermediate and deep earthquakes. Only two with good data. Promotor Prof. F.A. Vening Meinesz)

Ritsema, A.R. (1953)- New seismicity maps of the Banda Sea. J. Scientific Research Indonesia 2, 2, p. 48-54.

Ritsema, A.R. (1953)- Some new data about earthquake movements at great depth in the Indonesian Archipelago. Indonesian J. Natural Science (Majalah Ilmu Alam untuk Indonesia) 109, p. 34-40.
(In Indonesia shallow earthquakes widely distributed. Deeper earthquakes in narrower, rel. linear belts with deeper ones epicenters farther into Asian continent)

Ritsema, A.R. (1954)- The seismicity of the Sunda Arc in space and time. Indonesian J. Natural Science (Majalah Ilmu Alam untuk Indonesia) 110, p. 41-49.

Ritsema, A.R. (1956)- The seismicity of the Sunda Arc in space and time. Proc. 8th Pacific Science Congress Philippines 1953, 2a, p. 753-765.

Ritsema, A.R. (1957)- Earthquake-generating stress systems in SE Asia. Bull. Seismological Society of America 47, 3, p. 267-278.

(Data from 28 earthquakes in SE Asia between 1934-1954 suggest earthquakes (1) at crustal-depth dominated by transcurrent movements; (2) at intermediate depths mainly reverse fault movements and (3) at deep levels mainly normal fault movements)

Ritsema, A.R. & J. Veldkamp (1960)- Fault plane mechanisms of Southeast Asian earthquakes. Mededelingen en Verhandelingen 76, Kon. Nederlands Meteorologisch Instituut, De Bilt, p. 1-63.
(online at: www.knmi.nl/bibliotheek/knmipubmetnummer/knmipub102-76.pdf)
(In SE Asia fault movement and earthquake-generating stresses associated with deep-seated earthquakes are located in essentially vertical plane, those of shallow earthquakes in essentially horizontal plane. Eight seismic zones of ~2000km length: (1) Sumatra- Sunda Strait (NNE-SSW horoizontal pressure), (2) Java- Timor and (3) N Sulawesi (N-S horizontal pressure), (4) Philippines, (5) Solomon Islands, (6) E New Guinea, (7) W New Guinea and (8) Moluccas)

Robertson Research/ Simon PT /PERTAMINA (1992)- Eastern Indonesia: biostratigraphy, geochemistry and petroleum geology. Multi-client study, 238p. *(Unpublished)*

Robertson Research Int. (1998)- Global play fairways and petroleum systems: Eastern Indonesia. Multi-client study, p. . *(Unpublished)*
(Comprehensive hydrocarbon systems study Eastern Indonesia)

Robertson Utama Indonesia/ Horizon (2001)- Eastern Indonesia palaeogeography and sequence stratigraphy studies. Multi-client study, p. 1-107 + Enclosures *(Unpublished)*

Robertson/ Fugro (2006)- Cenozoic isopach of Southeast Asia. Multi-client study, 8p + map *(Unpublished)*

Rodnikova, R.D. (1986)- Geodynamics and petroleum formation in the sedimentary basins of Southeast Asia. International Geology Review 28, 4, p. 435-443.
(Russian point of view on 40+ sedimentary basins and petroleum content of Indo-Pacific region)

Royden, L.H. & L. Husson (2009)- Subduction with variations in slab buoyancy: models and application to the Banda and Apennine systems. In: S. Lallemand & F. Funiciello (eds.) Subduction zone geodynamics, Springer Verlag, Berlin, p. 35-45.
(Variations in buoyancy of subducting lithosphere control subduction rate, slab dip and position of volcanic arc. More buoyant slab segments correlate with slower subduction rates and steeper slab dip. In Banda and S Apennine subduction systems subduction slowed and ended shortly after entry of continental lithosphere into trench. Time period of ~10 m.y. needed for model subduction rates to slow to near zero, longer than ~3 M.y. observed in Banda systems. Possible explanation is slab break-off or formation of large slab windows during last stages of subduction allowing slab to steepen rapidly into final position)

Rutherford, K.J. & M.K. Qureshi (1981)- Geothermal gradient map of Southeast Asia, 2nd Edition. SE Asia Petroleum Exploration Society (SEAPEX) and Indonesian Petroleum Association (IPA), Jakarta, p. 1-51.

Rutten, L.M.R. (1923)- Cuba, The Antilles and the Southern Moluccas. Proc. Koninklijke Nederlandse Akademie van Wetenschappen, Amsterdam, 25, 7-8, p. 263-274.
(online at: https://dwc.knaw.nl/DL/publications/PU00014881.pdf)
(Similarities between the Antilles and Southern Moluccas islands chains already noted by Wichmann (1887), Martin (1890), etc. In both areas Mesozoic and Tertiary radiolarian deposits. No good maps, etc.)

Rutten, L.M.R. (1927)- Voordrachten over de geologie van Nederlandsch Oost-Indie. J.B. Wolters, Groningen, p. 1-839.
(online at: https://www.delpher.nl/nl/boeken/view?identifier=MMKB21:046525000:00068)
('Presentations on the geology of Netherlands East Indies'. Classic book, composed of comprehensive lecture series, remarkably well describing 1927 state of knowledge of geology of Indonesia. In Dutch)

Rutten, L.M.R. (1932)- De geologie van Nederlands Indie. Van Stockum, The Hague, p. 1-216.
(online at: https://resolver.kb.nl/resolve?urn=MMKB21:046525000:pdf)
('The geology of Netherlands Indies'. Concise, early textbook on the geology of Indonesia)

Rutten, L. (1938)- Le paysage des Indes Orientales et occidentales. Comptes Rendus Congres International de Geographie, Amsterdam 1938, 1-Actes du Congres, Brill, Leiden, p. 58-77.
(online at: https://resolver.kb.nl/resolve?urn=MMKB21:043939000:pdf)
('The landscapes of the East and West Indies'. Relatively little work done on geomorphology of the Indies (later significant geomorphology work by A.J. Pannekoek, H. Verstappen, etc.; JTvG). Landforms shaped by tropical climate with high rainfall, originally all covered by tropical rainforest with very rare rock outcrops. High denudation rates, creating mainly fine-grained sediments. More arid and seasonal in SE. Large parts of Indonesia, incl. N, E and SE Sumatra, C Java, E Borneo, Sulawesi, Seram, were once eroded to peneplains, but after recent uplifts became incised terranes with subhorizontal ridge crests up to 1000-2000m elevation. Young volcanoes in various stages of erosion. Areas with broad coastal swamps with mangroves indicate subrecent drowning. Etc.)

Rutten, M.G. (1952)- Geosynclinal subsidence versus glacially controlled movements in Java and Sumatra. Geologie en Mijnbouw 14, 6, p. 201-220.
(online at: https://drive.google.com/file/d/0B7j8bPm9Cse0S2czQkxZN3B5cE0/view)
(Mainly critique of Smit Sibinga (1949) Pleistocene glacial cycles interpretation)

Saint-Marc, P., F. Paltrinieri & B. Situmorang (1977)- Le Cenozoique d'Indonesie occidentale. Bull. Societe Geologique France 19, 1, p. 125-134.
('The Cenozoic of Western Indonesia'. Review of stratigraphy of Sumatra, Java, Java Sea and Kalimantan, based largely on Lemigas- Jakarta data)

Saita, T., D. Suetsugu, T. Ohtaki, H. Takenaka, K. Kanjo & I. Purwana (2002)- Transition zone thickness beneath Indonesia as inferred using the receiver function method for data from the JISNET regional broadband seismic network. Geophysical Research Letters 29, 7, 1115, p. 19/1-19/4.
(online at: http://onlinelibrary.wiley.com/doi/10.1029/2001GL013629/epdf)
(Seismicity-based study of variations in depths of 410km and 660km mantle discontinuities under Indonesia)

Salahudin, M. et al. (2007)- Map of sedimentary basins of Indonesia, 1:5 million. Geological Survey Indonesia, Bandung.
(Update of Hamilton (1974 sedimentary basins map)

Samuel, L., Purwoko, J. Purnomo, A.J. Bertagne & N.G. Smith (1994)- Results from interpretation of regional transects in Central Indonesia. Proc. 23rd Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, 4, p. 261-266.

Samuel, L., Purwoko, J. Purnomo, A.J. Bertagne & N.G. Smith (1996)- Results from interpretation of regional transects in Central Indonesia. The Leading Edge 15, 4, p. 261-266 (+ Errata, p. 720).
(Example of N-S megaregional seismic line from S of Lombok to East Borneo)

Samuel, L. & L. Gultom (1984)- Daur pengendapan di cekungan-cekungan minyak, Indonesia Barat. Geologi Indonesia (IAGI) 11, 1, p. 14-23.
('Sedimentation cycles in western Indonesian basins'. Four main sedimentary cycles in Eocene- Recent of Java, Sumatra, Kalimantan)

Sander, N.J., W.E. Humphrey & J.F. Mason (1975)- Tectonic framework of Southeast Asia and Australasia: its significance in the occurrence of petroleum. Proc. 9th World Petroleum Congress, Tokyo 1975, 9, 3, p. 83-105.

Sandiford, M. (2010)- Complex subduction. Nature Geoscience 3, p. 518-520.

(Mainly brief review of Spakman & Hall (2010) on how Banda arc formed above single horseshoe-shaped subducted slab, reflecting slab rollback. Large intermediate-depth earthquakes may reflect rupturing of slab)

Sani, K. & B.E. Yusuf (2016)- Eastern Region of Indonesia: continents adrift & the potential new play models. In: Revisit on Tectonic of SE Asia, Pertamina Internal Report, p. *(unpublished)*

Sano, S., M. Untung & K. Fujii (1978)- Some gravity features of island arcs of Java and Japan and their tectonic implications. Geological Survey Indonesia, Special Publ. 6, p. 183-207.

Sapiie, B., I. Gunawan, A. Rudyawan, A. Pamumpuni, A.H. Harsolumakso, C.I. Abdullah, A.H.P. Kusumadjana et al. (2017)- Development of new tectonic model and paleogeography as challenge for future hydrocarbon exploration of Eastern Indonesia. Proc. Joint Convention HAGI-IAGI-IAFMI-IATMI (JCM 2017), Malang, 57, p. 1-5.
(online at: https://www.iagi.or.id/web/digital/5/2017_IAGI_Malang_Development-of-New-Tectonic.pdf)
(In last 10 years much new2D and 3D seismic, gravity and fieldwork data acquired from E Indonesia. Also >25 new exploration wells drilled, mainly offshore, but no significant discoveries except for Kasuri area. New tectonic model and paleogeography study suggests new plays, including Triassic sandstone, normal fault blocks and flexural Jurassic reservoir. (unfortunately maps and charts illegible; printed at microscopic scale- JTvG)

Sapiie, B. & M. Hadiana (2007)- Mechanism of some rift basins in the Western Indonesia. Proc. 31st Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, IPA07-G-138, p. 1-9.
(Models for Paleogene rifting along W margin of Sundaland include purely extensional and strike slip fault control. Thermal anomalies in grabens parallel to subduction zone suggest back arc setting during rift phase, but other grabens not parallel to subduction zone. Different orientations suggest basins in W Indonesia developed by different tectonic system in Eocene-E Miocene. Sandbox modeling shows pre-existing basement structures fundamental control element on rifting)

Sartono, S. (1962)- The Banda geosyncline during Permian time: a palaeogeographic synthesis. Proceedings Institut Teknologi Bandung (ITB) 2, 4, p. 8-43.
(online at: https://journals.itb.ac.id/index.php/jmfs/article/view/9811)
(Presence of marine Permian rocks around Banda Sea on Savu, Roti, Timor, Leti, Luang and Babar (outer Banda Arc), E Sulawesi, Sula Spur, West Papua suggests existence of Banda geosyncline in Permian time. Banda geosyncline bordered land mass which included Sahul shelf. Trend of geosynclines follows present geanticlinal ridge of Outer Banda Arc islands. Distribution of Permian rocks and overthrust units in Timor suggests Permian geosyncline in SE Indonesia formed by two parallel basins, i.e. Sonnebait- Mutis in N (with neritic volcanic rocks of and Mutis overthrust units) and Kekneno basin in S)

Sartono, S. (1979)- Stratigrafi Indonesia. Dept. Teknik, Institut Teknologi Bandung (ITB), p.
('Stratigraphy of Indonesia. Course manual?)

Sartono, S. & S. Hadiwisastra (1988)- Comparison of post-Variscan tectonostratigraphic framework of Western and Eastern Indonesia. Proc. 17th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta,1, p. 447-459.
(Somewhat 'different' tectonics paper. Tectonostratigraphic reconstructions of Permo-Carboniferous to Quaternary rock formations in Sumatra and Timor indicate very similar geotectonic elements)

Sartono, S., S. Hadiwisastra & K.A.S. Astadiredja (1984)- Orogenesa intra-Miosen di Indonesia. Proc. 13th Annual Conv. Indonesian Association Geologists (IAGI), Bandung, p. 491-516.
('Intra-Miocene orogenesis in Indonesia')

Sato, T. (1981)- Geology of Southeast Asia: a review. In: S Ishihara & A. Sasaki (eds) Metallogeny of Asia, Proc. International Symposium on Metallogeny of Asia, Tsukuba-Tokyo 1980, Geological Survey of Japan, Report 261, p. 7-19.
(online at: https://www.gsj.jp/data/rep-gsj/No261.pdf)

(Brief 1980 review of plate tectonics and main structural elements in SE Asia (Indochina- Indonesia-Philippines- Japan)

Satyana, A.H. (2003)- Accretion and dispersion of Southeast Sundaland: the growing and slivering of a continent. Proc. 32nd Annual Conv. Indonesian Association Geologists (IAGI) and 28th HAGI, Jakarta 2003, p. 1-31.
(online at: www.academia.edu/12962139/ACCRETION_AND_DISPERSION_OF_SOUTHEAST_SUN Etc.)
(Sundaland made up of terranes or micro-plates from N Gondwanaland. SE Sundaland accreted crustal masses include oceanic Meratus, continental Paternoster, Ciletuh-Luk Ulo-Bayat subduction complex, Bantimala-Barru-Biru subduction complex, Flores Sea Islands, and continental Sumba Island. These crustal masses accreted to 'original' SE Sundaland (Schwaner Core) during 150-60 Ma (Late Jurassic- E Tertiary). Starting at ~50 Ma, in M Eocene, parts of SE Sundaland rifted and drifted E and SE-ward slivering continent. Dispersed masses include SW Sulawesi through opening of Makassar Strait, Flores Sea Islands, and Sumba. Slivering caused segmentation of E Java Sea basement to presently extend more E than should be)

Satyana, A.H. (2006)- Post-collisional tectonic escapes in Indonesia: fashioning the Cenozoic history. Proc. 35th Conv. Indonesian Association Geologists (IAGI), Pekanbaru 2006, PITIAGI2006-036, p. 1-27.
(online at: https://www.iagi.or.id/web/digital/15/2006_IAGI_Pekan-Baru_-Post-Collisional-Tectonic.pdf
(Five major collisional events fashioned Cenozoic tectonics of Indonesia, all with lateral escape features: (1) collision of India to Eurasia at 50 or 45 Ma (E-M Eocene), followed by escape of Sundaland SE-ward, formation of Sundaland sedimentary basins, opening of marginal seas of S China Sea, Andaman Sea; (2) 25 Ma (Late Oligocene) collision of oceanic island arc at S margin of Philippine Sea Plate collided with New Guinea; (3) collision of Bird's Head microcontinent with Papua at 10 Ma (Late Miocene) creating Lengguru foldbelt; (4) 11-5 Ma Buton-Tukang Besi and Banggai-Sula microcontinents collision with E Sulawesi ophiolite; (5) ~3 Ma N margin of Australian continent collision with Banda Island Arc)

Satyana, A.H. (2006)- Kontribusi eksplorasi hidrokarbon dalam beberapa pemikiran baru geodinamika Indonesia (makalah kunci). Seminar Nasional Geologi Indonesia: Dinamika dan produknya Pusat Survei Geologi, Badan Geologi Departemen Energi dan Sumberdaya Mineral, Bandung 2006, p. 1-27.
(online at: www.academia.edu/12104489/KONTRIBUSI_EKSPLORASI_HIDROKARBON_DALAM Etc.)
('Contributions to hydrocarbon exploration in some new thinking on the geodynamics of Indonesie (key papers)'. Discussion of impact on hydrocarbon exploration of some new thinking on Indonesia's geodynamics, including (1) collisional orogens, (2) escape tectonics, (3) accretion and dispersion of Sundaland, (4) dissimilarities of tectonics and structure of the Barito, Kutei, and Tarakan Basins, (5) tectonic indentatation of C Java, (6) deepwater sedimentation of Java, (7) nature of Rembang-Madura-Kangean-Sakala (RMKS) strike-slip fault, (8) Makassar Straits opening, and (9) Salawati Basin Polarity Reversal)

Satyana, A.H. (2007)- Cekungan sedimen Indonesia 1949-2006: Perkembangan konsep dan status terkini. Majalah Geologi Indonesia (IAGI) 21, 1, p. 1-5.
('Sedimentary basins of Indonesia 1949-2006- The development of concepts and the current status')

Satyana, A.H. (2007)- Sumbangsih eksplorasi minyak dan gas bumi terhadap pengetahuan geologi Indonesia: data dan pandangan baru geodinamika Indonesia. In: Geologi Indonesia: dinamika dan produknya, Geological Research Development Centre (GRDC), Bandung, Special Publ. 33, 2, p. 1-26.
('Contributions of oil and gas exploration towards the knowledge of Indonesia geology and geodynamics'. Discussion of aspects of Indonesia tectonics and sedimentation, particularly E Kalimantan, Java, Makassar straits and Salawati Basin)

Satyana, A.H. (2009)- Finding remnants of the Tethys Oceans in Indonesia: sutures of the terranes amalgamation. Proc. 38th Annual Conv. Indonesian Association Geologists (IAGI), Semarang 2009, p. 1-21.
(Indonesia built by terranes rifted off Gondwana between Devonian and Paleogene. Three successive Tethyan oceans opened and closed, leaving five belts of sutures. Paleo-Tethys (Devonian opening, M-L Triassic closing): Karimun-Bangka suture off NE Sumatra, linking E Malaya and Sibumasu terranes, and Natuna-Belitung suture between SW Borneo and E Malaya terranes. Meso-Tethys (Jurassic opening, mid-Cretaceous

closing): Takengon-Bandar Lampung, W Sumatra, between Sibumasu and Woyla terranes and Meratus-Bawean suture between SW Borneo/Schwaner and Paternoster-Kangean terranes. Ceno-Tethys suture is E Sulawesi Ophiolite Belt, marking suture between Banggai microcontinent and W Sulawesi terrane)

Satyana, A.H. (2010)- Finding remnants of the Tethys Oceans in Indonesia: sutures of the terranes amalgamation and petroleum implications. Proc. 34th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, IPA10-G-153, p. 1-26.
(Same paper as above)

Satyana, A.H. (2010)- Crustal structures of the Eastern Sundaland's rifts, Central Indonesia: geophysical constraints and petroleum implications. Proc. HAGI-SEG Int. Geosci. Conf., Bali 2010, IGCE10-OP-108, Jurnal Geofisika, p. 1-10.
(online at: www.academia.edu/16757061/CRUSTAL_STRUCTURE_OF_EASTERN_SUNDALAND_S_RIFTS_CENTRAL_INDONESIA_GEOPHYSICAL_CONSTRAINTS_AND_PETROLEUM_IMPLICATIONS)
(Discussion of M Eocene (~50Ma) and younger rift basins along E margin of Sundaland. Seimic sections across Makassar Straits, East Java Sea, Gorontalo and Bone Basins)

Satyana, A.H. (2010)- Gravity tectonics in Indonesia- a companion to plate tectonics: cases of isostatic exhumation and gravitational sliding. Proc. 39th Annual Conv. Indonesian Association Geologists (IAGI), Lombok, PIT-IAGI-2010-205, p. 1-12.
(online at: https://www.iagi.or.id/web/digital/12/2010_IAGI_Lombok_Gravity-Tectonics-in-Indonesia.pdf)
(At several areas in Indonesia geologic phenomena can not be explained by plate tectonics only. Uplifts in collision zones of Indonesia (Meratus (SE Kalimantan), Batui (E Sulawesi), Central Ranges of Papua, and Timor-Tanimbar uplifts may be caused by isostatic exhumation of once subducted microcontinents in collision zones. Compressional structures such as Samarinda Anticlinorium (E Kalimantan) and N Serayu fold-thrust belt (N C Java) may be related to gravitational gliding after hinterlands uplifts. Collision of microcontinents is by plate tectonics, but their subsequent uplifts of collisional through gravity tectonics)

Satyana, A.H. (2012)- Origins of the Banda Arcs collisional orogen and the Banda Sea. Berita Sedimentologi 23, p. 17-20.
(online at: https://journal.iagi.or.id/index.php/FOSI/article/download/188/158)
(Review of literature on the origin of oceanic Banda Sea and Banda collisional zone)

Satyana, A.H. (2012)- Accretion and dispersion of Southeastern Sundaland: the growing and slivering of continent and petroleum implications. AAPG Int. Conv. Exh., Singapore 2012, Search and Discovery Article 30261, p. 1-39. *(Abstract + Presentation)*
(online at: www.searchanddiscovery.com/documents/2012/30261satyana/ndx_satyana.pdf)
(Sundaland made up of terranes from N Gondwanaland, which rifted, drifted, and amalgamated in Late Paleozoic- Mesozoic. A number of SE Sundaland crustal masses accreted to original SE Sundaland (Schwaner Core) in 150-60 Ma. Starting at ~50 Ma (M Eocene), some of accreted mass of SE Sundaland rifted and drifted apart (SW Sulawesi, Flores Sea Islands, Sumba), due to transtension rifting related to tectonic escape of India-Eurasia collision and/or back-arc spreading by rollback of slower subduction, resulting in opening of Makassar Straits and Bone Basins, segmentation of E Java Basement and slivering of Sumba terrane)

Satyana, A.H. (2013)- Gravity tectonics in Indonesia: petroleum implications. Proc. 37th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, IPA13-G-161, p. 1-14.
(Examples of gravity tectonics (compressional structures not requiring tectonic shortening) in Indonesia: (1) Meratus Uplift, SE Kalimantan, (2) Samarinda Anticlinorium (E Kalimantan), (3) growth faults and toe thrusts in Tarakan offshore and N Makassar Basins, and (4) N Serayu Anticlinorium, C Java (reminescent of Van Bemmelen's 'undation theory'; JTvG))

Satyana, A.H. (2014)- New consideration on the Cretaceous subduction zone of Ciletuh- Luk Ulo- Bayat-Meratus: implications for southeast Sundaland petroleum geology. Proc. 38th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, IPA14-G-129, p. 1-41.

(online at: https://geologi.fitb.itb.ac.id/wp-content/uploads/sites/63/2021/09/IPA14-G-129.pdf)
(Cretaceous subduction under SE Sundaland more complex than previously considered. Subduction ceased in Bantimala and Meratus trenches in mid-Cretaceous due to docking of W Sulawesi and Paternoster-Kangean microcontinents, respectively. Late Cretaceous subduction migrated to Paternoster trench resulting in volcanic and magmatic rocks as well as forearc sediments in Meratus and Bantimala. Subduction in Ciletuh and Luk Ulo continued into Late Cretaceous. Bayat area may not be subduction continuation of Luk Ulo due to absence of subduction zone rock assemblages. Presence of NW Australian-derived microcontinents (W Sulawesi, Paternoster-Kangean, SE Java) opens petroleum possibilities in pre-Tertiary deposits)

Satyana, A.H. (2014)- Tectonic evolution of Cretaceous convergence of Southeast Sundaland: a new synthesis and its implications on petroleum geology. Proc. 43rd Annual Conv. Indonesian Association Geologists (IAGI), Jakarta, p. 1-28. *(online at: www.academia.edu/43212914/TECTONIC_EVOLUTION_OF_CRETACEOUS_CONVERGENCE_OF_SOUTHEAST_SUNDALAND_A_NEW_SYNTHESIS_AND_ITS_IMPLICATIONS_ON_PETROLEUM_GEOLOGY)*
(SE Sundaland recorded subduction of oceanic plate in Jurassic- Late Cretaceous (Meratus, Bantimala, Luk Ulo, Ciletuh). Subduction ceased in Bantimala and Meratus trenches in mid-Cretaceous due to docking of W Sulawesi and Paternoster-Kangean microcontinents. In Late Cretaceous, subduction migrated to Paternoster trench, resulting in volcanic- magmatic rocks and forearc sediments in Meratus and Bantimala. In Paleogene Meratus and Bantimala separated by opening of Makassar Straits. Subduction in Luk Ulo and Ciletuh trenches continued into Late Cretaceous (but no Late Cretaceous subduction-related metamorphic rocks). Jiwo Hills, Bayat, not subduction zone, but part of SE Java Microcontinent that docked in E Cretaceous)

Satyana, A.H. (2018)- Contribution of post-2000's petroleum exploration in Indonesia to some issues of tectonics: solutions to problems, new knowledge, and hydrocarbon implications. Proc. 42nd Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, IPA18-591-G, p. 1-23.
(Recent petroleum exploration contributed to solving debates on tectonics of Indonesia: (1) N Makassar Straits opening mechanism and nature of basement (extended continental crust from interpretation of volcanic geochemistry in well), (2) origin of Sumba micro-continent (rifted block from Sulawesi), (3) basement of Cendrawasih Bay (Pacific Plate oceanic/ arc volcanic crust). Some issues now better defined: (4) forearc areas of Sumatra- W Java (with Paleogene rift structures), and (5) foredeep areas of Seram-Tanimbar-Timor troughs (foredeeps, not subduction troughs). New knowledge of tectonics: (6) presence of Late Paleozoic-Mesozoic sections of Gondwanan micro-continents in East Java and S Makassar Straits (from interpretation of seismic and geochemical data), and (7) multiple rifts/terranes of Gorontalo Basin (from seismic interpretation))

Satyana, A.H. (2022)- The Neogene in Indonesia: the most important period of geologic evolution and formation of petroleum resources. Proc. 46th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, IPA22-G-313, p. 1-25.
(Extensive review of Neogene events, deposits, basins, petroleum systems, etc.)

Satyana, A.H., C. Armandita & R.L. Tarigan (2008)- Collision and post-collision tectonics in Indonesia: roles for basin formation and petroleum systems. Proc. 32nd Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, IPA08-G-140, p. 1-18.
(Collision following subduction and accretion of buoyant crustal masses and post-collision tectonics significant for basin formation and resultant petroleum systems. Examples of collisions important for petroleum geology: (1) Meratus (SE Kalimantan), (2) Buton and Banggai (E Sulawesi), (3) Seram, (4) Timor-Tanimbar, (5) Lengguru (Birds Head of Papua) and (6) Central Range of Papua)

Satyana, A.H., A.B. Nugroho & D. Sugandi (2021)- Trilogy of Southeast Sundaland terranes: re-uniting drifted terranes of Southeast Sundaland using common marker of the Late Cretaceous volcanics to volcanic-clastics of the Meratus Mountains, South Sulawesi and Sumba- implications for petroleum opportunities. Proc. 45th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, IPA21-G-39, p. 1-30.
(online at: https://tektonesiana.files.wordpress.com/2021/11/2021-re-uniting-trilogy-of-se-sundaland-terranes-satyana-et-al.-2021-ipa-proceedings.pdf)

(Meratus Range in SE Kalimantan, SW Sulawesi and Sumba all have similar Late Cretaceous volcanism and related volcanic-clastic sedimentation, suggesting they were contiguous parts of a Late Cretaceous volcanic arc system along SE Sundaland since mid-Cretaceous, and before Eocene- Oligocene dispersion (Palelo arc volcanics in Banda Terrane of Timor also part of this 'trilogy'?; JTvG))

Satyana, A.H., R.L. Tarigan & C. Armandita (2007)- Collisional orogens in Indonesia: origin, anatomy, and nature of deformation. Proc. Joint Convention 36th IAGI, 32nd HAGI, and 29th IATMI, Bali 2007, p. 1003-1061.
(online at: https://www.iagi.or.id/web/digital/28/2007_IAGI-Bali_Collisional-Orogens-in-Indonesia.pdf)
Extensive review of Indonesia collisional orogens: (1) Meratus: collision of Schwaner continental core with Paternoster micro-continent, (2) Sulawesi: collision of Banggai-Sula microcontinent and E Sulawesi Ophiolite, (3) Molucca Sea: collision of accretionary wedges of Sangihe and Halmahera arc-trench systems, (4) Seram: collision of Seram/N Banda arc and Bird's Head micro-continent, (5) Lengguru: collision between Bird's Head of N margin of Australian continent, (6) Papua Central Range: collision of island arc to S of Philippine Sea plate and N margin of Australian continent, and (7) Timor-Tanimbar: collision of Australian continent and Timor-Tanimbar/ S Banda arc)

Schneider, C.F.A. (1876)- Geologische Uebersicht uber den hollandisch-ostindischen Archipel. Jahrbuch Kaiserlich-Koniglichen Geologischen Reichsanstalt, Vienna, 26, 2, p. 113-134.
(online at: www.zobodat.at/pdf/JbGeolReichsanst_026_0113-0134.pdf)
('Geological overview of the Dutch East Indies archipelago'. First? countrywide review of Indonesia geology and useful minerals by German medical doctor Fr. Schneider. Two plates with small maps of Timor, Ambon, Leitimor, and Upper Siak and Anee (Anai) Gorge in Sumatra)

Schoffel, H. & S. Das (1999)- Fine details of the Wadati-Benioff zone under Indonesia and its geodynamic implications. J. of Geophysical Research 104, B6, p. 13101-13114.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/1999JB900091)
(Relocated earthquakes hypocenters show (1) portion of Indonesian arc between ~110°E- 123°E and >500 km deep, dips S at ~75° angle, direction opposite to upper part of N dipping slab, and (2) E of ~108 °E seismic zone wider near 670km than near 500 km depth. The first suggests S-ward lateral flow in mantle, relative to plate motion vector. From contortion of seismic zone along E portion of arc, average lateral shear strain rate in 300-670 km depth range is ~10-16s-1 over last 10-20 Myr)

Schuppli, H.M. (1946)- Geology of oil basins in the East Indian archipelago. American Assoc. Petroleum Geol. (AAPG) Bull. 30, 1, p. 1-22.
(Broad review of Indonesian oil-bearing basins by BPM-Shell geologist. Oil fields of Tertiary basins of Sumatra, Java, and Borneo produced > one billion barrels of oil to end of 1940. Oil produced to date almost exclusively from sands of Miocene and Pliocene age. Etc.)

Schwartz, M.O., S.S. Rajah, A.K. Askury, P. Putthapiban & S. Djaswadi (1995)- The Southeast Asian tin belt. Earth-Science Reviews 38, p. 95-290.
(online at: https://www.academia.edu/112378209/The_Southeast_Asian_tin_belt)
(N-S trending SE Asian tin belt 2800 km long/ 400 km wide, from Myanmar- Thailand to Malay Peninsula and Indonesian Tin Islands Bangka- Belitung. Five granitoid provinces: (1) Main Range in W Malay Peninsula, S Peninsular Thailand and C Thailand (184-230 Ma; almost entirely biotite granite, 55% of tin production); (2) Northern Province of N Thailand (200-269 Ma; 0.1% of tin production, also mainly biotite granite); (3) Eastern Province of E Peninsular Malaysia- E Thailand (Malaysian part subdivided into E Coast Belt (220-263 Ma), Boundary Range Belt (197-257 Ma) and Central Belt (79-219 Ma; wide compositional range; tin deposits only in biotite granite in E Coast Belt) (3% of production); (4) Western Province in N Peninsular and W Thailand and Burma (22-149 Ma; biotite granite, 14% of tin production); (5) Granitoids of Indonesian Tin Islands (193-251 Ma) do not permit grouping into above units; most tin deposits associated with Main Range-like plutons)

Scotese, C.R., L.M. Gagahan & R.L. Larson (1988)- Plate tectonic reconstructions of the Cretaceous and Cenozoic ocean basins. Tectonophysics 155, p. 27-48.

(Nine global reconstructions of ocean basins and continental plates for E Cretaceous- Pleistocene times. Late Cretaceous and Early Tertiary plate reorganizations in Indian Ocean e result of progressive subduction of intra-Tethyan rift/ spreading system)

Setiawan, N.I. (2013)- Metamorphic evolution of Central Indonesia. Ph.D. Thesis Kyushu University, Japan, p. 1-318. *(Unpublished)*
(Petrological, geochemical and geochronological investigations of metamorphic rocks from Bantimala and Barru Complexes in S Sulawesi, Luk Ulo Complex in C Java, Meratus Complex in S Kalimantan, and Nangapinoh area of Schwaner Mountains in W Kalimantan. High-P metamorphic rocks predominantly eclogites and blueschists with Early Cretaceous K-Ar ages. Eclogites-blueschists from S Sulawesi contain MORB, within-plate basalt, and arc signatures. Eclogites-blueschists from C Java mostly within-plate basalt signatures. Protoliths of metatonalites from Schwaner Mountains from volcanic-arc tectonic environment. Detrital zircons from S Sulawesi metamorphics similar clusters of Silurian-Permian ages (~430–280 Ma). S Sulawesi, SE Kalimantan and C Java possibility parts of single (E Cretaceous) subduction complex.

Setiawan, N.I., S. Husein & M.F. Alfyan (2014)- Speculative models of exhumation of High-Pressure Low-Temperature metamorphic rocks from central part of Indonesia: an implementation of concepts and processes. Proc. Seminar National Kebumian 7, Universitas Gadjah Mada, Yogyakarta 2014, P3O-02, p. 504-523. *(online at: https://repository.ugm.ac.id/135217/1/504-523%20P3O-02.pdf)*
(Published exhumation models of high-P/low-T metamorphic rocks in subduction zones suggest buoyancy is only effective force to exhume rocks from deeply subducted levels to base of crust. Serpentinites are extremely buoyant and may facilitate exhumation. Requires rapid uplift and cooling to maintain high-P minerals in rocks. Presence of melange units intercalated with high-P metamorphics and chaotic occurrence of different metamorphic facies typically in subduction channel environment)

Setiawan, N.I., Y. Osanai & M.I. Khalif (2016)- U-Pb detrital zircon geochronology of metamorphic rocks from South Kalimantan, South Sulawesi, and Central Java, Indonesia: related metamorphism and tectonic implications in Central Indonesia region. Proc. 14th Regional Conference Geology and Mineral Resources of SE Asia (GEOSEA XIV) and 45th Annual Conv. Indonesian Association Geologists (IAGI) (GIC 2016), Bandung, p. 289-292.
(High P metamorphics from Meratus in SE Kalimantan, Bantimala in S Sulawesi and Luk Ulo in C Java generally tied to NW-directed Cretaceous subduction. Zircons show no metamorphic rims and therefore viewed as detrital grains and provenance ages of metamorphic rock protoliths. Youngest detrital zircon ages in Bantimala- Meratus ~199-194 Ma, in Luk Ulo ~100 Ma. Ages from Bantimala glaucophane-quartz schist ~430-199 Ma (Silurian- E Jurassic), Barru garnet schist ~1930, 1730, 1600-1400 Ma, 1050 Ma (Proterozoic), and 550-280 Ma (Cambrian-Permian); Meratus epidote-barroisite schist 232 ± 39 Ma (Late Triassic; range 296-194 Ma); Luk Ulo gneiss mainly 127-100 Ma (E Cretaceous; also older)

Setiawan, N.I., Y. Osanai, N. Nakano, T. Adachi, Y. Tatsuro, K. Yonemura, A. Yoshimoto, J. Wahyudiono & K. Mamma (2013)- An overview of metamorphic geology from Central Indonesia: importance of South Sulawesi, Central Java and South-West Kalimantan metamorphic terranes. Bull. Graduate School Social and Cultural Studies, Kyushu University, 19, p. 39-55.
(online at: https://api.lib.kyushu-u.ac.jp/opac_download_md/26209/p039.pdf)
(Study of metamorphic complexes at Bantimala and Barru (S Sulawesi; High P), Luk Ulo (C Java; High P; pelitic schist, eclogite, blueschist), Meratus (S Kalimantan) and Nangapinoh area of Schwaner Mountains (W Kalimantan). Metamorphic rocks from S Sulawesi, C Java and S Kalimantan E Cretaceous ages (~110-130 Ma) and possibly from single subduction complex. Metamorphic rocks in Schwaner Mts metatonalite with Late Triassic U-Pb zircon magmatic ages (~233 Ma), i.e. older than most Schwaner Mts granitoids (Late Jurassic-Cretaceous), but within range of NW Kalimantan granitoids (Carboniferous- Triassic; 204-320 Ma))

Setiawan, N.I., Y. Osanai, N. Nakano, T. Adachi, K. Yonemura, A. Yoshimoto, L.D. Setiadji, K. Mamma & J. Wahyudiono (2014)- Geochemical characteristic of metamorphic rocks from South Sulawesi, Central Java, South and West Kalimantan in Indonesia. ASEAN Engineering J., C, 3, 1, p. 107-127.
(online at: www.seed-net.org/download/GeoE013_revised_060513.pdf)

(Metamorphic complexes as products of Cretaceous subduction outcrop in C Java, S Kalimantan and S Sulawesi. Mainly high-pressure metamorphic rocks from metabasic and sedimentary protoliths. Metabasic rocks from S Sulawesi and C Java basalts with both MORB and within-plate signatures. Metatonalites from Schwaner Mountains calc-alkaline arc volcanics; adakitic metatonalite age of 233± 3 Ma (Late Triassic))

Setijadji, L.D. (2010)- Cretaceous subduction zones in Indonesia: paleogeography, arc granitoid plutonism and metallic mineralizations. Proc. IGCP 507 Project Symposium Paleoclimates in Asia during the Cretaceous, Yogyakarta 2010, p. 59-60. *(Abstract only)*
(Two or three separate Cretaceous subduction zones in W Indonesia, with oceanic crust subducting under Eurasia plate (1) M-Lt Cretaceous Sumatra-Meratus arc, E and N- facing subduction, 2000 km long, with granitoid plutonism from W Sumatra (Sikuleh, Manunggal, Ulai, Garba and Sulan granites; 120-75 Ma), N of Java, to Meratus Mountains of SE Kalimantan; (2) S-facing subduction at NW Kalimantan, resulting in two granitoid plutonic arcs, i.e. late E Cretaceous Schwaner Arc and Late Cretaceous Sunda Shelf Arc. Both are parallel in E-W direction, ~1500 km long, in W-C Kalimantan, with Late K arc south of Early K arc. Cretaceous arc granitoid plutonism very different from Triassic granitoids of Bangka- Belitung)

Seubert, B.W. (2015)- Volcaniclastic petroleum-systems- theory and examples from Indonesia. Proc. 39th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, IPA15-G-026, p. 1-19.
(online at: https://www.petropep.com/download_1_html_files/Seubert_2015_Volcaniclastic_petroleum_systems.pdf)
(Potential volcaniclastic reservoirs present in Indonesia across range of stratigraphic intervals, but underexplored. Presence of volcanic material may enhance preservation and of organic matter and maturation of hydrocarbons. Porosity prediction still problematic. Examples of volcaniclastic reseroirs in Indonesia: Bengkulu, W, C and E Java, S Sulawesi, etc.)

Sevastjanova, I. & R. Hall (2011)- Detrital zircon from the Banda Arc: insights into the palaeogeographic reconstructions. In: Conf. Sediment provenance studies in hydrocarbon exploration & production, Geological Society, London, 2011, p. 27-28. *(Abstract only)*
(Zircon U-Pb ages from Karimunjawa Arch (SW Borneo Block) similar to those from Seram, suggesting similar source areas. Mesoproterozoic zircons in Karimunjawa Arch uncommon on Cathaysian Blocks, providing evidence against Cathaysian affinity for SW Borneo Block. Triassic zircons abundant in Karimunjawa Arch. Zircons suggest existence of local Permian-Triassic zircon source in E Indonesia and/or on Australia NW Shelf)

Sevastjanova, I., R. Hall & S. Zimmermann (2012)- Detrital zircon provenance and insights into palaeogeographic reconstructions of the Banda Arc. Proc. 1st Congres Int. Geologia de Timor-Leste, Dili 2012, Abstract book, p. 103-105. *(Abstract only)*

Shaw, R.D. (1990)- Frontier basins of Southeast Asia: a review of their hydrocarbon potential. Proc. 8th Offshore South East Asia Conference, Singapore, SE Asia Petroleum Exploration Society (SEAPEX) 9, OSEA 90176, p. 69-80.
(70% of SE Asian basins frontier basins with no significant hydrocarbon production, but contain estimated 22% of recoverable oil reserves. Basins in regions of oceanic-continent convergence (N Australia, Sunda margin) more prospective than areas of oceanic plates convergence)

Shaw, R.D. & G.H. Packham (1992)- The tectonic setting of sedimentary basins of Eastern Indonesia: implications for hydrocarbon prospectivity. Australian Petroleum Exploration Assoc. (APEA) Journal 32, 1, p. 195-213.

Shaw, R.D. & G.H. Packham (1992)- Heatflow trends in Southeast Asia: implications for petroleum prospectivity. In: 9th SEAPEX Offshore Southeast Asia Conf. (OFFSEA 92), Singapore 1992, Proc. SE Asia Petroleum Exploration Society (SEAPEX) 10, OSEA 92243, p. 130-144.
(75% of SE Asia oil reserves in basins with contemporary heatflow of 2 HFU or more)

Shi, H., T. Li, R. Zhang, G. Zhang & H. Yang (2020)- Imaging of the upper mantle beneath Southeast Asia: constrained by teleseismic P-wave tomography. Remote Sensing (MDPI) 12, 18, 2975, p. 1-23.
(online at: https://www.mdpi.com/2072-4292/12/18/2975)
(Tomography velocity model, mainly over Indonesia. High velocity anomalies correlated to subduction plates and stable land masses, low velocity anomalies to island arcs and upwelling of mantle materialf rom subducting plates. S-ward subducting high-V body in Nansha Trough remnant of subduction of Dangerous Grounds under Borneo. High-V body under Indochina-Natuna-Borneo-Palawan at 240-660 km likely remnant of Proto-South China Sea (PSCS) and Paleo-Tethys. PSCS was southern branch of Paleo-Tethys and gateway between Paleo-Tethys and Paleo-Pacific Ocean (Map of Tethyan sutures does not agree with known outcrop informatio; JTvG))

Shulgin, A. (2012)- Subduction zone segmentation along the Sunda margin. Doct. Thesis Christian-Albrechts-Universitat, Kiel, Germany, p. 1-128.
(online at: http://d-nb.info/1023870339/34)
(Mainly collection of five papers on Java-Sumatra forearc regions. Geophysical models show significant variations of crustal and upper mantle structure of Sunda Arc subduction complex along-strike and across-strike of margin. Increased thickness of crystalline crust in Savu Sea attributed to approach of Australian shelf to trench. Offshore Lombok oceanic crust thickness 7 km thick and heavily fractured by normal faults. Crustal structure of Roo Rise oceanic plateau revealing crustal thickness of 15km, its subduction causing deformation of forearc and complex evolution of subduction processes)

Sigit, S. & T.H.F. Klompe (1962)- I. A brief outline of the geology of the Indonesian Archipelago. II. Geological Map of Indonesia, scale 1:5,000,000, p. 1-18.
(Brief summary of Indonesia geology, with schematic structural map and 1:5m geologic map (see also updated version by Sukamto et al., 2011))

Simandjuntak, T.O. (1988)- An outline of tectonic development of the Indonesian archipelago and its bearing on occurrence of energy resources. In: Symposium on Tectonics and energy resources in East Asia, WGMM-CCOP, Tsukuba, Japan, p.

Simandjuntak, T.O. (1992)- Tectonic development of the Indonesian archipelago and its bearing on the occurrence of energy resources. Indonesia. Jurnal Geologi dan Sumberdaya Mineral (JGSM) 2, 9, p. 2-23.
(Review of Indonesian tectonics and relation to hydrocarbons, coal, geothermal potential. Indonesia triple junction convergence since Neogene. Pre-Neogene tectonics (1) Paleozoic- Mesozoic_Paleogene convergence in W Indonesia; (2) Mesozoic- Paleogene divergence in E Indonesia, producing allochthonous terranes in E Indonesia. Permian convergence recorded by Permian andesitic volcanics, similar to rocks present in W Kalimantan and E Main Range of Malay Peninsula. Similarities between E Indonesian microcontinents include Permo-Carboniferous metamorphics, Permo-Triassic plutonics, overlain by Mesozoic passive margin seqeunce, E Cretaceous mostly missing, Late Cretaceous radiolarian calcilutites and Tertiary platform carbonates, etc.;generally regarded as derived from New Guinea. No plate reconstructions)

Simandjuntak, T.O. (1992)- Review of tectonic evolution of Central Indonesia. Jurnal Geologi dan Sumberdaya Mineral (JGSM) 2, 15, p. 2-18.
(C Indonesia nine tectonic provinces or belts: (1) W Sulawesi Magmatic Arc (Late Cretaceous- Paleogene flysch and arc volcanics and some probably Cretaceous granitoids); (2) C Sulawesi Metamorphic Belt (tightly folded schist, incl. blueschist, N-S fold axes, probably Late Cretaceous metamorphism); (3) E Sulawesi Ophiolite Belt (>1000km long belt from E Arm Sulawesi to Kabaena and Buton in SE, possibly up to 15km thick; in places with deformed Late Cretaceous radiolarian chert, K-Ar ages of ophiolite ~93-37 Ma; E Miocene obduction?); (4) Banda Micro-continents (Banggai-Sula, Seram-Buru platform, Misool-Birds Head, etc., terranes of Paleozoic metamorphic basement with Permo-Triassic granitic plutons, overlain by Late Triassic sediments, E Jurassic hiatus, M-L Jurassic passive margin sediment, etc.; originated from N Papuan margin); (5) Banda Sea floor (Cretaceous?)/ Sulawesi Sea floor (Eocene), (6) N Maluku Basin and Talaud-Tifore Ridge; (7) Minahasa- Sangihe Volcanic Arc; (8) W Halmahera Province (Tertiary Arc volcanics) and (9) E Halmahera Province (ophiolites of poorly known age))

Simandjuntak, T.O. (1993)- Neogene tectonics and orogenesis of Indonesia. In: G.H. Teh (ed.) Proc. Symposium Tectonic framework and energy resources of the western margin of the Pacific Basin, Kuala Lumpur 1992, Bull. Geological Society Malaysia 33, p. 43-64.
(online at: https://gsm.org.my/wp-content/uploads/gsm_file_2/702001-101022-PDF.pdf)
(Indonesian Archipelago developed during Neogene convergence of 3 megaplates, Eurasian craton, Pacific plate and Australian craton. Five major crustal elements, 4 orogenic belts: Sunda orogeny, (2) Banda orogeny, (3) Melanesian orogeny, (4) Talaud orogeny. 'Transitional Complex': between 3 major plates composed of 17 disctinct units: E Sulawesi, Banggai-Sula, Timor-Tanimbar, Misool-Birds Head, etc.)

Simandjuntak, T.O. (1993)- Neogene tectonics and orogenesis of Indonesia. Jurnal Geologi dan Sumberdaya Mineral (JGSM) 3, 20, p. 2-32.
(Similar to other Simandjuntak (1993) above)

Simandjuntak, T.O. (1994)- Tectonic evolution of Central Indonesia. In: J.L. Rau (ed.) Proc. 29th Session Committee Co-ord. Joint Prospecting Mineral Resources in Asian Offshore Areas (CCOP), Hanoi 1992, 2, p. 91-113.
(Central Indonesia is triple junction of Indo-Australian, Pacific and Eurasian plate convergence. Seven tectonostratigraphic provices, various episodes of convergence and divergence. Reconstructions show Banda Microcontinent (which subsequently breaks up into Banggai-Sula, Tukang-Besi, Seram-Buru, Misool-Birds Head, etc.) attached to Papua New Guinea part of Australian continent in Triassic-Jurassic time (similar to Pigram, Struckmeyer reconstructions, but not Hall and others))

Simandjuntak, T.O. (1994)- Neogene orogeny and mountain building in Indonesia. In: J.L. Rau (ed.) Proc. 30th Session Committee Co-ord. Joint Prospecting Mineral Resources in Asian Offshore Areas (CCOP), Bali 1993, 2, p. 47-86.
(online at: https://repository.unescap.org/items/177e9366-1a15-4fc9-986f-15520603d2c3)
(Neogene tectonics of Indonesia marked by five different orogenic belts, Barisan Orogeny in Sumatra, Late Neogene Sunda Orogeny in Java and Nusatenggara, Banda Orogeny in Sulawesi (Tethyan-type collision in E Sulawesi), Talaud Orogeny in North Molucca Sea and Melanesian Orogeny in New Guinea)

Simandjuntak, T.O. (1998)- Tsunamis in active plate margins of Indonesia. Proc. 33rd Session Coord. Comm. Coastal and Offshore Programmes E and SE Asia (CCOP), Shanghai 1996, 2, p. 334-361.
(Overview of active tectonics across Indonesia and relation to tsunamis. Tsunamis triggered by earthquakes below seafloor, most of them over graben-like structures in areas of extensional tectonics, but transtensional zones also have tsunami potential)

Simandjuntak, T.O. (2000)- Geotectonic of Indonesia: the birth of the Indonesian Archipelago. Jurnal Geologi dan Sumberdaya Mineral (JGSM) 10, 104, p. 8-21.
(Tectonic development of Indonesia initiated by collision in Sumatra and Kalimantan in E Triassic of Paleozoic microcontinents detached from Gondwana, followed by reccurring subduction systems until today. In Sumatra 3 terrnanes: (1) SE part of Sibumasu Terrane (Mergui, Tigapuluh Mts and Kuantan- Duabelas Mts); (2) SE end of Lhasa- W Burma Terrane (Woyla, Sikuleh, Natal and Asai-Garba Terranes); (3) SE-most Malaysia Terrain (Gunungkasih-Lingga-Singkep). W Kalimantan and Meratus also parts of S-most China- Indochina terranes. Irian Jaya and PNG part of N Australian continental margin, which rifted in Triassic, followed by development of passive margin in Jurassic- Cretaceous and carbonate platform in Paleogene. At end-Paleogene, promontory of Australian continent collided with oceanic island arc at S margin of Philippine Sea Plate. Prior to Neogene emplacement of allochthonous microcontinents from N margin of Australia in Banda Sea, E Indonesia was part of N Indian Ocean and S Philippine Sea plates, in which a number of oceanic island arcs formed in Paleogene. Six Neogene orogenic belts in Indonesian region. No reconstruction maps (refers to map of 1999 Indonesian-Japanese Geotectonics Working Group; Sato et al.))

Simandjuntak, T.O. (2000)- Neogene tectonics of Indonesia. AAPG International Conference Exhib., American Assoc. Petroleum Geol. (AAPG) Bull. 84, 9, p. 1492. *(Abstract only)*

(Seven distinctive Neogene orogenies in Indonesia: 1) Sunda Orogeny in Java and E Indonesia: normal convergence producing Andean type orogenic belt, 2) Barisan Orogeny: oblique convergence and dextral transpressional wrenching in Sumatra, 3) Talaud Orogeny in N Maluku Sea: double-arc collision with sinistral transpressional wrenching, 5) Banda Orogeny: M Miocene collision between Banggai-Sula, Tukangbesi- Buton and Mekongga Platform against E Sulawesi ophiolite belt; 6) Melanesian Orogeny in Irian Jaya and PNG: oblique convergence with thin-skinned tectonics, 7) Dayak Orogeny in Kalimantan: triple junction extensional tectonics with hot spots of Neogene volcanics)

Simandjuntak, T.O. (2003)- The Indonesian active margins. Jurnal Geologi dan Sumberdaya Mineral (JGSM) 13, 136, p. 2-24.
(Discussion of young collisional and strike-slip belts of Indonesia)

Simandjuntak, T.O. & A.J. Barber (1996)- Contrasting tectonic styles in the Neogene orogenic belts of Indonesia. In: R. Hall & D. Blundell (eds.) Tectonic evolution of Southeast Asia, Geological Society, London, Special Publ. 106, p. 185-201. *(online at: https://*
earthjay.com/earthquakes/20190714_halmahera/simandjuntak_barber_2016_orogenic_belts_indonesia.pdf)
(Six separate Neogene orogenic belts: Sunda (W Java-Flores), Barisan, Talaud, Sulawesi, Banda (Timor-Tanimbar) and Melanesian (New Guinea))

Simatupang, M. (1988)- Indonesian mineral development digest: a sourcebook on mining and mineral development in Indonesia. Indonesian Mining Association, Jakarta, p. 1-565.

Simons, W.J.F., B.A.C. Ambrosius, R. Noomen, D. Angermann, P. Wilson, M. Becker, E. Reinhart, A. Walpersdorf & C. Vigny (1998)- The final geodetic results of the GEODYSSEA project: the combined solution. In: P. Wilson & G.W. Michel (eds.) The Geodynamics of S and SE Asia (GEODYSSEA) Project, GeoForschungsZentrum, Potsdam, Scientific Technical Report STR 98/14, p. 27-38.

Simons, W.J.F., B.A.C. Ambrosius, R. Noomen, D. Angermann, P. Wilson et al. (1999)- Observing plate tectonics in SE Asia: geodetic results of the GEODYSSEA project. Geophysical Research Letters 26, 14, p. 2081-2084.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/pdf/10.1029/1999GL900395)
(Geodetic results of GEODYSSEA Project 1994-1996 GPS data)

Simons, W., B. Ambrosius, C. Vigny, A. Socquet, C. Subarya et al. (2003)- Crustal motion and block behaviour in S.E. Asia: a decade of GPS measurements. EGS-AGU-EUG Joint Assembly, Nice 2003, Abstract 10940.
(SE Asia region was observed with 45 GPS site 'GEODYSSEA project (1991-1998). Additional GPS sites have set-up since 2000. High-quality GPS data set, spanning almost decade, combined into kinematic model, with 100+ station motions in ITRF-2000. Highlights are relative motion and boundaries of Sundaland block. In Sulawesi, two micro-blocks confirmed and number of sites on E Malaysia, indicate small but consistent relative motion with respect to Sundaland block (see also full paper by Simons et al. (2007))

Simons, W.J.F., A. Socquet, C. Vigny, B.A.C. Ambrosius, S. Haji Abu, C. Promthong, C. Subarya, D.A. Sarsito, S. Matheussen, P. Morgan & W. Spakman (2007)- A decade of GPS in Southeast Asia: resolving Sundaland motion and boundaries. J. of Geophysical Research 112, B06420, p. 1-20.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2005JB003868)
(GPS velocity field of SE Asia based on 10 years (1994-2004) of GPS data at more than 100 sites in Indonesia, Malaysia, Thailand, Myanmar, the Philippines, and Vietnam. Sundaland moves E at ~6 mm/yr in S to 10 mm/yr in N. Sundaland moves independently with respect to S China, E Java, Sulawesi and N tip of Borneo. Slow W-ward movement of N tip of Borneo relative to Sundaland absorbed at NW Borneo Trench. Red River fault still active. Sundaland deformation occurs along its boundaries with fast-moving neighboring plates)

Siregar, P. (2024)- Tectonostratigraphy of Eastern Indonesia: a new understanding of the Mesozoic stratigraphy of Eastern Indonesia using sequence stratigraphy approach. Proc. 48th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, IPA24-G-22, p.
(Conference presention only; paper not published in IPA Proceedings for administrative reasons)

Siregar, P.H., H. Panggabean & D.A. Sebayang (2024)- New understanding of the Mesozoic tectonostratigraphy of Eastern Indonesia. Berita Sedimentologi 50, 1, p. 51-74.
(online at: https://journal.iagi.or.id/index.php/FOSI/article/view/459/435)
(Timing of Late Paleozoic Mesozic pre-, syn and post-rift 'megasequences' in E Indonesia different between N (Aru-Kumawa, Bintuni, Berau, Semai, Papua Birds Head, Seram) and S (Timor Sea, Abadi-Tanimbar, W Arafura Sea), related to fragmentation history of Australian continental margin: (1). North area with Late Permian-Triassic syn-rift fill and separation from Australian mainland by M-Late Triassic (Meso-Tethys opening); (2) South area with Triassic-Late Jurassic rift-fill and separation from Australian Continent by Late Jurassic. With series of regional seismic lines and tectonostratigraphic charts)

Situmorang, B. (1977)- The western Indonesia fault pattern: tectonic significance with relation to wrench tectonics. Lemigas Scientific Contributions 1, 2, p. 5-18.
(Four compression phases in W Indonesia since pre M Mesozoic: (1) N80°- 260E pre- M Mesozoic equatorial compression; (2) N158- 338E M Mesozoic meridional compression; (3) N2- 182E late Cretaceous- E Tertiary meridional compression, and (4) N174- 35E Plio-Pleistocene compression. Bantam trend three fault systems of different ages: M-Mesozoic left lateral strike-slip faults in C and S Sumatra, late Cretaceous- E Tertiary right lateral strike-slip faults in Sunda Strait and on Java, and Plio-Pleistocene left lateral strike-slip faults in Sumatra. M Mesozoic and late Cretaceous- E Tertiary compression responsible for creation of basic basin configuration in C and S Sumatra, W Java and W Java Sea areas. En echelon folds forming hydrocarbon bearing anticlines in Sumatra and Java related to Plio-Pleistocene compression)

Situmorang, B. (1986)- Notes on the Pre-Tertiary petroleum potential of Eastern Indonesia. Lemigas Scientific Contributions 10, 2, p. 16-23.
(online at: www.journal.lemigas.esdm.go.id/index.php/SCOG/article/view/70)
(Thick late Paleozoic-Mesozoic rift-drift facies formed excellent hydrocarbon plays in NW Australia and potential prospects extend into microcontinental blocks of E Indonesia)

Situmorang, B. (1987)- Pre Tertiary petroleum potential of Eastern Indonesia. Proc. 23rd Session Committee Co-ord. Joint Prospecting Mineral Resources in Asian Offshore Areas (CCOP), Madang 1986, 2, p. 72-79.
(E Indonesia prospective hydrocarbon plays in Pre-Tertiary, mainly in microcontinental blocks of Australian origin and associated Pre-Tertiary rift basins)

Situmorang, B. (ed.) (1989)- Proceedings Sixth Regional Conference on the geology, mineral and hydrocarbon Resources of SE Asia (GEOSEA VI), Jakarta 1987. Indonesian Association Geologists (IAGI), Jakarta, p. 1-504.
(online at: http://library.dmr.go.th/Document/Proceedings-Yearbooks/M_2/1987/7...)

Situmorang, B., Siswoyo, M. Thamrin & B. Yulianto (1983)- Heatflow variation in Western Indonesian basinal areas: implication on basin formation and hydrocarbon potential. Proc. 12th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, 1, p. 157-169.
(Average heat flow in Tertiary Basins of W Indonesia ~1.95- 2.58 μ Cal/cm2 s, except in C Sumatra where heat flow is ~3.27 ± 0.9 μ Cal/cm2 s. Less variability of heat flow in Java than in Sumatra basins. Lowest variability in S Sumatra, largest in C Sumatra. Variability probably reflects variation in amount of extension)

Situmorang, M. (1994)- Distribution and characteristics of detrital heavy minerals in Eastern Indonesian waters. In: J.L. Rau (ed.) Proc. 29th Session Committee Co-ord. Joint Prospecting Mineral Resources in Asian Offshore Areas (CCOP), Hanoi 1992, Bangkok, 2, p. 231-251.

(Heavy minerals in seafloor sediments around Banda Arc region mainly mafic volcanic and sedimentary minerals, with some metamorphic minerals. Principal minerals hyperstene, augite, zircon, tourmaline, enstatite, garnet, chlorite and hornblende)

SKK Migas Memoir Team (2017)- Petroleum systems of the Eastern Indonesia region- Guidance for hydrocarbon exploration in Eastern Indonesia. SKK Migas Memoir 1, Jakarta, p. 1-489.

SKK Migas and FITB ITB (2024)- Cenozoic Carbonate Reservoir in Indonesia. SKK Migas Memoir 2, vol. 1 (Eastern Indonesia), Jakarta, ITB Press, p. 1-
(preprint online at: https://bit.ly/MemoirCarbonateEasternID?r=qr)
(10 chapters on oil-gas fields with Cenozoic carbonate reservoirs in Java (incl. chapter 2- Banyu Urip and Cepu Block Oligo-Miocene carbonates by Agung B. Cahyono & Ethika), Makassar Straits (Ruby), E Sulawesi (Senoro) and W Papua (Matoa))

SKK Migas and FITB ITB (2024)- Cenozoic Carbonate Reservoir in Indonesia. SKK Migas Memoir 2, vol. 2 (Western Indonesia), Jakarta, ITB Press, p. 1-581.
(preprint online at: https://bit.ly/MemoirCarbonateWesternID?r=qr)
(22? chapters on oil-gas fields with Cenozoic carbonate reservoirs in Sumatra, Java, S Kalimantam)

Sladen, C. (1997)- Exploring the lake basins of East and Southeast Asia. In: A.J. Fraser et al. (eds.) Petroleum geology of Southeast Asia, Geological Society, London, Special Publ. 126, p. 49-76.
(SE Asia contains large number of lake basins producing significant amounts of oil and gas: Late Mesozoic-Early Tertiary basins of China, Early Tertiary basins of Malaysia- West Indonesia. Wax content commonly 10-35% in oils from lacustrine source-rocks, occasionally reaching 45%. Source rock petroleum generators dominated by Botryoccocus and Pediastrum green algae)

Slancova, A., A. Spicak, V. Hanus & J. Vanek (2000)- How the state of stress varies in the Wadati-Benioff zone: indications from focal mechanisms in the Wadati-Benioff zone beneath Sumatra and Java. Geophysical J. International 143, p. 909-930.
(Earthquake focal mechanisms define eight stress domains: 3 in Sumatra (SI-SIII), 5 in Java region (JI-JV). Domains with similar states of stress occur in both regions in similar positions. Maximum compression perpendicular to trench in SI, SII and JII (depth range 0-165 km). Orientation of max. compression almost parallel to trench in SIII and JIII (depth 25-225 km). Focal mechanisms of domains SII, SIII, and JII, JIII different stress layers and overlap of earthquakes with different focal mechanisms from two different stress-state layers, parallel to Wadati-Benioff zone. Slab-dip-parallel extension observed in JIV (depth 225-315 km), slab-dip-parallel compression in JV (>400 km))

Smit Sibinga, G.L. (1926)- De geologische bouw van het Euraziatisch grensgebied. Handelingen 4e Nederlandsch-Indisch Natuurwetenschappelijk Congres, Weltevreden 1926, p. 440- .
('The geological structure of the Eurasian border area')

Smit Sibinga, G.L. (1927)- Wegener's theorie en het ontstaan van den Oostelijken O.I. Archipel. Tijdschrift Koninklijk Nederlands Aardrijkskundig Genootschap (2) 44, p. 581-598.
(Discussion on merits of Wegener's continental drift theory (1912) in Indonesian archipelago. Considers basic idea of horizontal movements of continents and associated polar wandering as valid. As did Molengraaff, SS struggles with origin of the configuration of the 'Circum-synclinal Banda basin'. Remarkable conclusion: 'Various reasons to believe 'the Lesser Sunda islands, Sulawesi and the Moluccas are originally marginal chains of Sundaland, from which they separated and developed their present position and character as result of collision with the Australian continent'. No figures)

Smit Sibinga, G.L. (1928)- De geologische ligging der Boven-Triadische olie- en asfaltafzettingen in de Molukken. Natuurkundig Tijdschrift voor Nederlandsch-Indie 58, p. 111-121.

('The geological setting of the Upper Triassic oil and asphalt deposits in the Moluccas'. Triassic oil and asphalt deposits in Moluccas in similar facies on Timor, Ceram, Buru, Buton and SE Sulawesi. Formed at edge of Mesozoic Sundaland craton. No figures)

Smit Sibinga, G.L. (1933)- The Malay double (triple) orogen, I. Proc. Koninklijke Nederlandse Akademie van Wetenschappen, Amsterdam, 36, 2, p. 202-210.
(online at: https://dwc.knaw.nl/DL/publications/PU00016394.pdf)
(Discussion of orogenetic belts of Indonesia: Sunda Orogen, Molucca Orogen, Pelew orogen. One of early authors suggesting current geotectonic structure of the Indonesian region is result of N-ward movement of Australian continent (similar to Wegener suggestion; now commonly accepted, but rejected by Van Bemmelen 1933 and others), etc.' JTvG))

Smit Sibinga, G.L. (1933)- The Malay double (triple) orogen, II. Proc. Koninklijke Nederlandse Akademie van Wetenschappen, Amsterdam, 36, 3, p. 323-330.
(online at: https://dwc.knaw.nl/DL/publications/PU00016411.pdf)
(Discussion of 'Australian double orogen' in New Guinea, etc. No figures)

Smit Sibinga, G.L. (1933)- The Malay double (triple) orogen, III. Proc. Koninklijke Nederlandse Akademie van Wetenschappen, Amsterdam, 36, 4, p. 447-453.
(online at: https://dwc.knaw.nl/DL/publications/PU00016429.pdf)
(East Indian Archipelago consists of double, partly triple orogen between Asiatic and Australian continental masses. Molucca-orogen shows larger negative gravity anomalies than Sunda-orogen)

Smit Sibinga, G.L. (1935)- Geologie en zwaartekracht in den Indischen Archipel. Critische beschouwing over eenige recente publicaties van Prof. Dr. J.H.F. Umbgrove. Tijdschrift Koninklijk Nederlands Aardrijkskundig Genootschap (2) 52, p. 581-598.
(online at: https://resolver.kb.nl/resolve?urn=MMUBA13:001683001:pdf)
('Geology and gravity in the Indies Archipelago; a critical review of some recent publications of Prof. Umbgrove'. Discussion of timing of Old Tertiary (Te4?), M Miocene (Tf2?) and Plio-Pleistocene (underappreciated by Umbgrove 1932, 1935) folding events)

Smit Sibinga, G.L. (1937)- On the relation between deep-focus earthquakes, gravity and morphology in the Netherlands East Indies. Gerlands Beitrage Geophysik, Leipzig, 51, 4, p. 402-409.
(On zones of deep earthquakes that dip towards SE Asia mainland, recently identified by Berlage (now known as Wadati-Benioff zone), with apparent irregularies in Molucca Sea, etc. Asiatic and Australian deep-focus earthquake hypocenter planes down to 700km, both with increasing focal depth towards continent, may be regarded as deep-seated fault- or thrust planes. Remarkable coincidence between morphological discrepancies, excessive negative gravity anomalies and active bathyseismic belt suggest intimate relationships and consequently great youth of these phenomena. With two maps)

Smit Sibinga, G.L. (1938)- Additional note on the relation between deep-focus earthquakes, gravity and morphology in the Netherlands East Indies. Gerlands Beitrage Geophysik, Leipzig, 53, 4, p. 392-394.
(Reply to Visser (1938) critique of Smit Sibinga (1937) conclusions. New hypocenter data from Gutenberg and Richter support earlier conclusion))

Smit Sibinga, G.L. (1939)- The Malay Archipelago in Pre-Tertiary times. Proc. Sixth Pacific Science Congress, San Francisco 1939, p. 231-240.
(Review of pre-Tertiary stratigraphy of Indonesia, from crystalline schists of pre-Paleozoic or E Paleozoic age through Silurian and Devonian, Carboniferous, Permian, Triassic, Jurassic, and Cretaceous, with observations on tectonics and paleogeography)

Smit Sibinga, G.L. (1940)- Der Malayische Archipel. Geologische Jahresberichte (Borntraeger, Berlin) II, B, p. 393-416.
('The Malay Archipelago'. Part 1 of review of geology of Indonesian region)

Smit Sibinga, G.L. (1942)- Der Malayische Archipel. Geologische Jahresberichte (Borntraeger, Berlin) IV, B, p. 362-382.
(('The Malay Archipelago'. Continuation of paper above. Brief reviews of geology of Timor, Mesozoic stratigraphy, etc. No new synthesis)

Smit Sibinga, G.L. & L.F. de Beaufort (1925)- Over het ontstaan van den Maleischen Archipel. Verslagen Geologische Sectie Geologisch Mijnbouwkundig Genootschap 3, 4, p. 64- .
(Summary of lecture on tectonics of Indonesian region, incorporating zoogeographic data)

Smith, N.G., A.J. Bertagne, L.Samuel, Purwoko et al. (1995)- Eastern Indonesia Megaregional Project-principles and results of a regional study. AAPG Annual Convention Abstracts, American Assoc. Petroleum Geol. (AAPG) Bull. 79, 6, p. 912. *(Abstract only)*

Sobari, I., A. Susilo, Subagio & E. Mirnanda (1993)- Bouguer anomaly map of Indonesia, scale 1:5M. Geological Research Development Centre (GRDC), Bandung, p. .

Soeria-Atmadja, R., R.C. Maury, H. Bellon, J.L. Joron, Y. Cyrille, H. Bougault & Hasanuddin (1986)- The occurrence of back-arc basalts in western Indonesia. Proc. 14th Annual Conv. Indonesian Association Geologists (IAGI), Jakarta, p. 125-132.
(online at: https://www.iagi.or.id/web/digital/40/PIT_IAGI_1985_paper12.pdf)
(Incl. Quaterny back-arc basaltic volcanics of Sukadana in S Sumatra. Lack plagioclase phenocrysts and closer to MORB-type tholeiites than island-arc basalts. Resemble weakly alkaline Neogene Karimunjawa volcanics (Java Sea))

Soeria-Atmadja, R., H. Permana & A. Kadarusman (2005)- High-pressure metamorphics and associated peridotite in Eastern Indonesia. Majalah Geologi Indonesia (IAGI) 20, 2, Special Edition, p. 61-67.
(Association of high-pressure metamorphic rocks and ophiolites in E Indonesia, SE Kalimantan and Java)

Soeria-Atmadja, R., S. Suparka, C. Abdullah, D. Noeradi & Sutanto (1998)- Magmatism in western Indonesia, the trapping of the Sumba Block and the gateways to the east of Sundaland. J. Asian Earth Sciences 16, 1, p. 1-12.
(online at: http://eprints.upnyk.ac.id/12476/1/Magmatism%20in%20western%20Indonesia.pdf)
(Similarities in Late Cretaceous-Paleogene stratigraphy and calc-alkaline magmatism between Sumba, S Sulawesi and SE Kalimantan suggest Sundaland origin for all these areas. S-ward migration of Sumba to present fore-arc position is after Late Cretaceous-Paleocene time)

Soesilo, J. (2012)- New Cretaceous tectonic setting of southeast Sundaland based on metamorphic evolution. Ph.D. Thesis, Institut Teknologi Bandung (ITB), p. 1-224. *(Unpublished)*
(parts online at: https://digilib.itb.ac.id/assets/files/2019/2012_DS_PP_JOKO_SOESILO_1-BAB_52.pdf)
(See also Soesilo et al. (2015). Includes new U-Pb dating of zircons in high-metamorphic rocks of Meratus (136.8 ± 3.6 and Luk Ulo (125-101 Ma))

Soesilo, J., V. Schenk, E. Suparka & C.I. Abdullah (2015)- The Mesozoic tectonic setting of SE Sundaland based on metamorphic evolution. Proc. 39th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, IPA15-G-205, p. 1-13.
(online at: http://eprints.upnyk.ac.id/12899/1/2015_Proceedings%20The%2039th%20IPA%20Annual%20Conven Etc.)
(SE Sundaland marked by two tectonic sutures, separated by Paternoster microcontinent: (1) Jurassic accretionary remnant W of micro-continent (S Meratus Suture, with metamorphic belt extending offshore beneath Java Sea and N-ward to Mangkalihat Peninsula or to W part of C Sulawesi. Part of Jurassic high-P belt, overprinted by lower P and thermal metamorphism, in response to crustal thickening due to collision of Paternoster against Sundaland in E Cretaceous and subsequent Cretaceous calc-alkaline magmatism; (2) mid-

Cretaceous accretionary complex E of Paternoster micro-continent, extending from Karangsambung, C Java, to Bantimala-Latimojong-Pompangeo in Sulawesi (HP metamorphic rocks ages ~100-128 Ma))

Song, W., Y. Yu, S.S. Gao, K.H. Liu & Y. Fu (2021)- Seismic anisotropy and mantle deformation beneath the Central Sunda Plate. J. of Geophysical Research: Solid Earth 126, 3, e2020JB021259, p. 1-12.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/pdf/10.1029/2020JB021259)
(Seismic shear wave splitting suggests spatial variation of azimuthal anisotropy beneath central Sunda plate. Most of Malay Peninsula with mostly trench-perpendicular fast orientations that can be attributed to mantle flow induced by Indo-Australian subduction. Plate motion-parallel anisotropy observed in N Borneo and Nansha Block, where APM-driven simple shear in the transitional layer between the partially coupled lithosphere and asthenosphere. APM-induced flow may be locally modified by fossil slab segment beneath Sabah. etc.)

Sopaheluwakan, J. (1994)- Tectonic evolution of the Banda Arc, East Indonesia: Southern Tethyan crust obduction metamorphism and fragmentation of eastern Gondwanaland. Proc. 30th Anniversary Symposium, Research and Development Center for Geotechnology (LIPI), Bandung 1994, 2, p. 157-162.
(online at: elib.pdii.lipi.go.id/katalog/index.php/searchkatalog/.../1194.pdf)
(Studies of metamorphic aureoles at base of dismembered ophiolites on Timor, Seram, etc., suggest ophiolite obduction is major mechanism for emplacement of southern Tethyan crust onto Australian continental margin)

Sopaheluwakan, J. (1994)- Critiques and a new perspective on basement tectonic studies in Indonesia: a review of current results and their significance in geological exploration. Proc. 30th Anniversary Symposium, Research and Development Center for Geotechnology (LIPI), Bandung 1994, 2, p. 163-175.
(online at: elib.pdii.lipi.go.id/katalog/index.php/searchkatalog/.../1195.pdf)
(Not all metamorphic rocks in Indonesia are of pre-Tertiary age and of continental origin. Places like Timor and Seram have very young metamorphic rocks, formed during ophiolite obduction. Mutis Complex of Timor formed in oceanic setting near Jurassic spreading center)

Sopaheluwakan, J. (1995)- Cenozoic tectonic evolution of Indonesian seaways. In: S. Nishimura & R. Tsuchi (eds.) Proc. Oji Seminar on Neogene evolution of Pacific Ocean Gateways, Kyoto, IGCP-355, p.

Sopaheluwakan, J. (1999)- Understanding the Indonesian orogeny: a basement geology perspective. In: H. Darman & F.H. Sidi (eds.) Tectonics and sedimentation of Indonesia, FOSI-IAGI-ITB Regional Seminar to commemorate 50th anniversary of Van Bemmelen's Geology of Indonesia, Bandung 1999, p. 19. (*Abstract)*
(Indonesia three types of orogeny: (1) Sunda type, Late Mesozoic Cordilleran-type Meratus-Karangsambung orogen along rim of SE Sundaland and Neogene orogeny. Suspected collision of microcontinent in Meratus-Karangsambung orogen. (2) Makassar type, outboard of Meratus-Karangsambung orogen, Oligocene and Miocene orogenies as result of obduction events of E Arm of Sulawesi and docking of Australian-derived microcontinents onto Sulawesi; (3) Banda type, with repeated pre-collisional obductions of short-lived spreading ridges in front of Australian passive margins in Oligocene and Miocene)

Sopaheluwakan, J. (2007)- Geodinamika Indonesia dan keberlangsungan hidup Manusia: dari ilmu kebumian ke ilmu-ilmu sistem kebumian. In: Geologi Indonesia: dinamika dan produknya, Geological Research Development Centre (GRDC), Bandung, Special Publ. 33, 1, p. 1-27.
('Indonesian geodynamics and human survival: from geography to the sciences of the earth system'. Three major tectonic theories for Indonesia: (1) undation theory, (2) plate tectonics and more recently (3) plume tectonics becoming fashionable)

Sopaheluwakan, J. (2011)- Earth system processes of the Wallacea and their implications to the Indonesian Throughflow and biogeography. Marine Research in Indonesia (LIPI) 36, 1, p. 29-42.
(online at: https://www.academia.edu/48818340/Earth_System_Processes_of_the_Wallacea_and_Their_Implications_to_the_Indonesian_Throughflow_and_Biogeography)
(Review of complex plate tectonic evolution of Central Indonesia Wallacea region (Sulawesi, Banda Sea, Banda Arcs, Moluccas, etc.), and its effects on Indonesian Throughflow currents from W Pacific to Indian Ocean)

Spakman, W. & H. Bijwaard (1998)- Mantle structure and large-scale dynamics of South-East Asia. In: P. Wilson & G.W. Michel (eds.) The geodynamics of S and SE Asia (GEODYSSEA) Project. Scientific Technical Report STR/14, Geoforschungszentrum, Potsdam, Germany, p. 313-339.
('New' Utrecht tomographic velocity model in general agreement with previous findings (e.g. subduction of Indian plate below Sunda Arc), but do not find detachment of (or tear in) slab around 400 km below Sumatra. Sunda slab bends W toward Andaman island arc below N Sumatra. Subduction below Sunda arc imaged down to 1500km, indicating penetration into lower mantle. Subduction below Sulawesi is S extension of Philippines subduction. Slab also imaged below Halmahera (Molucca collision zone). Banda subduction no lower mantle anomaly, suggesting limited duration of subduction (~10-12 Myrs). Huge lower mantle reservoir of subducted slab beneath Sundaland)

Spakman, W. & R. Hall (2010)- Surface deformation and slab-mantle interaction during Banda arc subduction rollback. Nature Geoscience 3, 8, p. 562-566.
(online at: https://www.researchgate.net/profile/W-Spakman/publication/234362891_The_Banda_Arc_subduction_enigma/links/5ad083514585154f3f485143/The-Banda-Arc-subduction-enigma.pdf)
(with supplementary material, movie at http://searg.rhul.ac.uk/current_research/plate_tectonics/index.html)
(Tomography velocity model of mantle under suggests Banda arc results from subduction of single slab. Jurassic embayment of dense oceanic lithosphere enclosed by continental crust once existed within Australian plate. Banda subduction began at ~15 Ma when active Java subduction tore E-ward into embayment. Present morphology of subducting slab only partially controlled by shape of embayment. As Australian plate moved N, Banda oceanic slab rolled back towards SSE. Increasing resistance of mantle to plate motion folded slab and caused strong deformation of crust)

Spakman, W., C. Rangin & H. Bijwaard (1998)- Tomographic constraints on the tectonic evolution of SE Asia. In: AAPG International Conference Exhib, American Assoc. Petroleum Geol. (AAPG) Bull. 84, 9, p. 1495. *(Abstract only)*
(online at: https://www.searchanddiscovery.com/abstracts/html/2000/intl/abstracts/394.htm)
(New 3D image of P-wave seismic velocity heterogeneity of lithosphere and mantle of SE Asia. Subducted oceanic slab found below most of Sunda arc but with varying depth penetration. A 500 km long slab under Burma separated from Andaman-Sumatra slab (~700 km deep) by 300-400 km wide gap associated with Andaman Basin. Central Sunda slab penetrates lower mantle to 1500 km, but subduction below Banda arc confined to 700 km. No clear slab imaged below W New Guinea; long N dipping slab under E New Guinea)

Spicak, A., R. Matejkova & J. Vanek (2013)- Seismic response to recent tectonic processes in the Banda Arc region. J. Asian Earth Sciences 64, p. 1-13.
(Analysis of shallow (<100 km) seismological data. 11 domains of earthquakes identified. Two discrete recent subduction zones in region: N- dipping Banda subduction in S and S-dipping Seram subduction in N; no W-dipping subduction zone observed to interconnect Banda and Seram zones into a single bent subduction zone. Instead, area between them is cut by elongated domain of earthquakes corresponding to W-ward continuation of Tarera-Aiduna fault zone)

Stauffer, H.K. (1945)- The geology of the Netherlands Indies. In: P. Honig & F. Verdoorn (eds.) Science and scientists in the Netherlands Indies. Board for the Netherlands Indies, Surinam and Curacao, New York, p. 320-335.
(online at: https://archive.org/details/in.ernet.dli.2015.183759)
(Old, general overview of Indonesia geology by former BPM petroleum geologist)

Steinshouer, D.W., J. Qiang, P.J. McCabe & R.T. Ryder (1999)- Maps showing geology, oil and gas fields, and geologic provinces of the Asia-Pacific region. U.S. Geological Survey (USGS) Open- File Report 97-479F, p. 1-13.
(online at: https://pubs.usgs.gov/of/1997/ofr-97-470/OF97-470F/aspac.PDF)
(Report with three 1:7.5 M scale maps of geology, geologic provinces and oil-gas fields: 1 The Far East, 2 Southeast Asia, 3 Australia and New Zealand)

Stille, H. (1920)- Die angebliche junge Vorwartsbewegung im Timor- Ceram Bogen. Nachrichten Kon. Gesellschaft Wissenschaften Gottingen, Mathematisch-Physikalische Klasse, p. 174-180.
(online at: https://www.digizeitschriften.de/dms/img/?PID=GDZPPN002505746)
('The supposed young forward movements in the Timor- Ceram arc'. Discussion of Brouwer (1917 and 1920) papers, questioning the importance of horizontal movements. Not much new, no figures)

Stille, H. (1943)- Malaiischer Archipel und Alpen. Abhandlungen Preussischen Akademie Wissenschaften, Mathematisch-Naturwissenschaftliche Klasse, Berlin, p. 1-16.
('The Malay Archipelago and the Alps'. Comparison of Indonesian region tectonics and European Alps)

Stille, H. (1945)- Die tektonische Entwicklung der hinterindischen Festlands- und Inselgebiete. In: H. Stille & F. Lotze (eds.) Die tektonische Entwicklung der pazifischen Randgebiete II, Geotektonische Forschungen 7/8, Borntraeger, Berlin, p. 34-153.
('The tectonic development of the SE Asian mainland and island areas'. Review of geology and tectonic development of Indonesian region, in chapter 3 of textbook on tectonic developments of Circum-Pacific regions (p. 67-122). Interpretations in framework of Stille's famous but outdated ideas of geosynclines and continental growth during 'Variscan', Cimmeride', 'Laramide', etc. orogenic cycles)

Stille, H. (1945)- Die tektonische Entwicklung der neoaustralischen Inselwelt. In: H. Stille & F. Lotze (eds.) Die tektonische Entwicklung der pazifischen Randgebiete II, Geotektonische Forschungen 7/8, Borntraeger, Berlin, p. 210-260.
('The tectonic development of the Neo-Australian island world'. Chapter 5 of textbook on tectonic developments of Circum-Pacific regions)

Storetvedt, K.M., L.S. Leong & M. Adib (2003)- New structural framework for SE Asia, and its implications for the tectonic evolution of Borneo. Bull. Geological Society Malaysia 47, p. 7-26.
(online at: www.gsm.org.my/products/702001-100611-PDF.pdf)
(Unconventional 'Global Wrench Tectonics' model for SE Asia tectonics, particularly NW Borneo margin)

Storetvedt, K.M. & B. Longhinos (2014)- Australasia within the setting of global wrench tectonics. NCGT Journal 2, 1, p. 66-96.
(online at: https://www.researchgate.net/profile/Karsten-Storetvedt-2/publication/ Etc.)
(Another 'unconventional' SE Asia tectonic paper from the 'Global Wrench Tectonics' school)

Subarya, C. (2004)- The maintenance of Indonesia geodetic control network- in the earth deforming zones. In: 3rd Int. Federation of Surveyors (FIG) Regional Conference, Jakarta 2004, TS8, p. 1-6.
(online at: www.fig.net/pub/jakarta/papers/ts_08/ts_08_1_subarya.pdf)
(On increase of GPS geodetic measurements in Indonesia since 1992 and velocities across plate boundaries)

Subono, S. & Siswoyo (1995)- Thermal studies of Indonesian oil basins. In: Y. Togashi (ed.) Symposium on Heat flow map, geodynamic implications and maturity modelling for hydrocarbons, Committee Co-ord. Joint Prospecting Mineral Resources in Asian Offshore Areas (CCOP), Bangkok, Technical Bulletin 25, p. 37-53.

Sudarmono, T. Suherman & B. Eza (1997)- Paleogene basin development in Sundaland and it's role to the petroleum systems in Western Indonesia. In: J.V.C. Howes & R.A. Noble (eds.) Proc. Int. Conference Petroleum Systems of SE Asia and Australasia, Indonesian Petroleum Association (IPA), Jakarta 1997, p. 545-560.

Sudradjat, A., H.D. Tjia et al. (eds.) (1989)- J.A. Katili Commemorative Volume (60 years). Geologi Indonesia (IAGI) 12, 1, p. 1-635.
(19 papers in English, 5 in Indonesian, as tribute to Prof. J.A. Katili. Mostly on tectonic history and volcanism in Indonesia)

Suggate, S. & R. Hall (2003)- Predicting sediment yields from SE Asia: a GIS approach. Proc. 29th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, IPA03-G-015, p. 1-16.
(Areas of Indonesia like New Guinea, Borneo, Sumatra, etc., produce very high volumes of sediments relative to size of its landmasses. Possibly tied to intense precipitation/ runoff and many areas of recent rapid uplift)

Sukamto, R., T.C. Amin & D. Sukarna (eds.) (2003)- Atlas geologi dan potensi sumberdaya mineral dan energi kawasan Indonesia, scale 1: 10,000,000. Geological Research Development Centre (GRDC), Bandung, p. 1-39.
('Atlas of geology and potential of minerals and energy in Indonesia'. Atlas with 33 Indonesia-wide maps of regional geology, volcanic rocks, radiometric ages, gravity, carbonates, ophiolites, Pre-Tertiary rocks, earthquakes, mineral resources, energy resources, etc.)

Sukamto, R. & M.M. Purbo-Hadiwidjoyo (1997)- Regional geology of Indonesia. In: E.M. Moores & R.W. Fairbridge (eds.) Encyclopedia of European and Asian regional geology, Chapman and Hall, London, p. 376-384.

Sukamto, R., N. Ratman & T.O. Simandjuntal (2011)- Peta Geologi Indonesia (Geological Map of Indonesia), scale 1: 5,000,000. Geol. Research Development Centre, Bandung.

Sukamto, R., B. Setyogroho, S. Atmawinata, S. Aziz, B. Jamal, Suharsono & S. Andi-Mangga (1990)- The Jurassic rocks in Indonesia. Bull. Geological Research Development Centre (GRDC) 14, p. 1-14.
(Overview of the 17 regions in Indonesia with Jurassic rocks in outcrop, mainly in E Indonesia, also in Kalimantan and Sumatra)

Sukamto, R. & Sidarto (1990)- Gagasan baru tentang asal berbagai mintakat geologi di Indonesia. Bull. Geological Research Development Centre (GRDC) 14, p. 59-72. *(also in Proc. 16th Annual Meeting IAGI, Bandung 1987)*
('New thoughts on the origin of geological terranes in Indonesia'. Brief overview of terranes)

Sukamto, R. & T. Suhanda (1977)- Some notes on magmatic activities and metallic mineral occurrences in northeastern Indonesia. Bull. Geological Society Malaysia 9, p. 253-271.
(online at: https://gsm.org.my/wp-content/uploads/gsm_file_2/702001-101288-PDF.pdf)
(Review of Permian-Recent volcanic and non-volcanic arcs in NE Indonesia, with different types of metallic mineral belts)

Sukamto, R. & G.E.G. Westermann (1992)- Indonesia and Papua New Guinea. In: G.E.G. Westermann (ed.) The Jurassic of the Circum-Pacific, Cambridge University Press, p. 181-193.
(Summary of Jurassic stratigraphy and ammonites in Irian Jaya, Waigeo, Misool, Obi, Bangai-Sula, SE and S Sulawesi, Buton, Buru, Seram, Tanimbar-Babar, Timor-Roti, Kalimantan, Sumatra and PNG)

Sukandarrumidi (1994)- Geologi Sejarah. Gadjah Mada University Press, p. 1-109.
('Historical Geology'. Introductory textbook of historical geology, with examples from Indonesia)

Sukandarrumidi (2007, 2016)- Geologi Mineral Logam. Gadjah Mada University Press, p. 1-161.
('Geology of metallic minerals'. Introductory textbook, with examples from Indonesia)

Sulaiman, M.I., P.A. Subakti, Haolia, D.Y. Fatimah, I. Madrinovella, A. Abdullah, D.A. Zaky, A.S.B. Oka et al. (2021)- Early results of Eastern Indonesia P-wave tomography study using regional events. Proc. The 3rd Southeast Asian Conference on Geophysics (SEACG), Bandung 2020, IOP Conference Series: Earth and Environmental Science 873, 012068, p. 1-10.
(online at: https://iopscience.iop.org/article/10.1088/1755-1315/873/1/012068/pdf)
(Relocated 2015-2019 earthquake data from E Indonesia and new P-wave tomography model depict geological features like continuous Banda Slab subducted all around Banda Arc from Timor to Seram, dipping down to 600 km depth. Seram Slab with discontinuity from 300-350 km, suggesting possible break-off or tearing slab W

of Seram. Negative velocity anomaly along Banda Volcanic arc at 30 80 km depth known as Volcanic front-line zone, reflecting partial melting (with volcanoes Banda Api, Manuk, Serua, Nila, Teon and Damar. Etc.))

Sunarjanto, D., B. Wicaksono, Sriwijaya, S. Munadi & B. Wiyanto (2008)- Updating of Indonesian Tertiary basin sedimentary basins. Proc. 32nd Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, IPA08-G-163, p. 1-12.
(LEMIGAS (2007) basins map lists 63 Tertiary sedimentary basins in Indonesia. Example of use of gravity data in S Kalimantan to determine basin outlines: propose to combine Pembuang and Barito basins)

Sunarjanto, D., S. Wijaya, S. Munadi, B. Wiyanto & D.F. Prasetio (2008)- Indonesian Tertiary sedimentary basin. Lemigas Scientific Contributions Oil and Gas (SCOG), 31, 2, p. 19-27.
(online at: https://journal.lemigas.esdm.go.id/index.php/SCOG/article/view/1002)
(Description of new Lemigas Tertiary basins map, 2007. Showing 63 Tertiary sedimentary basins (16 oil-gas producing basins, 8 drilled basins with discovery, 15 drilled basins with no discovery and 24 undrilled basins)

Suparka, S., H. Harjono & H. Gunawan (1991)- The microplates of the Western Sunda Arc. In: E.P. Utomo et al. (eds.) Proc. The Silver Jubilee LIPI- Symposium on the Dynamics of subduction and its products, Yogyakarta-Karangsambung 1991, Research and Development Center for Geotechnology, Indonesian Institute of Science, (LIPI), Bandung, p. 35-37.

Surjono, S.S. & H.D.K. Wijayanti (2012)- Tectono-stratigraphic framework of Eastern Indonesia and its implication to petroleum systems. ASEAN Engineering J., C 1, 1, p. 138-152.
(online at: www.seed-net.org/download/C1-1_Paper10.pdf)
(Brief review of East Indonesia tectonics and stratigraphy, and geology of Tanimbar Islands)

Susilo, I. Meilano, H.Z. Abidin & B. Sapiie (2015)- A new definition of Sunda Block rotation model. Proc. Joint Convention HAGI-IAGI-IAFMI-IATMI, Balikpapan, JCB2015-373, p. 1-3.
(online at: https://www.iagi.or.id/web/digital/3/2015_IAGI_Balikpapan_A-New-Definition-of-Sunda.pdf)
(GPS observations from 1996-2013 suggest Sunda block (Indochina, Thailand, Peninsular Malaysia, Sumatra, Borneo, Java) moves ESE-ward at 26-32 mm/yr)

Susilo, I. Meilano, H.Z. Abidin, B. Sapiie, J. Efendi & A.B. Wijanarto (2016)- Preliminary result of Indonesian strain map based on geodetic measurements. Proc. 5th Int. Symposium on Earth hazard and disaster mitigation, Bandung 2015, AIP Conference Proceedings 1730, 040004, p. 1-3. *(Extended Abstract) (online at: https://www.researchgate.net/profile/Hasanuddin-Z-Abidin/publication/302073690_Preliminary_result Etc.)*
(GPS measurements from 1993-2014 across Indonesia region provide 2-3mm-level precision of surface velocity estimates. GPS velocities used here to construct crustal strain rate map. Highest strain rates along Sumatran fault, Sumatra-Java trench, North Molucca Sea and Seram- northern West Papua areas)

Suzuki, Y. (1993)- On the formation of Southeast Asia island arcs. Hokuriku Geological Institute Report 3, p. 107-123.

Syracuse, E.M. & G.A. Abers (2006)- Global compilation of variations in slab depth beneath arc volcanoes and implications. Geochem. Geophysics Geosystems 7, 5, Q05017, p. 1-18.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2005GC001045)
(Depth to top of subducting slab below arc volcanoes 72- 173 km, with global average of 105 km. Depths correlate poorly with most subduction parameters, but correlations exist between depth and slab dip. Largest along-strike variation in Java, where depth shifts by 70 km on either side of 108° E from 90 km in W Java- SE Sumatra to 150 km in Central and East Java, changing over ~150 km along strike. Jump at overlapping of ends of two volcanic lines. Dominant change is shift in location of volcanoes in relation to slab and trench. E of 119° E (W Banda Sea), volcanoes step back toward trench, and slab depths once again become near 100 km)

Syirojudin, M., J. Murjaya, S. Zubaidah, Hasanudin, S. Ahadi, N. Efendi & T. Suroyo (2018)- Indonesian geomagnetic maps for Epoch 2015.0 to cover of Indonesian regions. Proc. 41st HAGI Annual Conv. Exhib. 2016, IOP Conference Series: Earth and Environmental Science 132, 012003, p. 1-7.
(online at: https://iopscience.iop.org/article/10.1088/1755-1315/132/1/012003)
(Updated 2015 geomagnetic map of Indonesia. (N.B.: First geomagnetic map of Indonesia by Dr. Elie van Rijckevorsel from Rotterdam, published in 1879-1880 not mentioned; JTvG))

Tandon, K.A. (1998)- A study of models and controls for basin formation during continental collision: (1) Australian lithosphere along Banda Orogen (Indonesia) and (2) Alboran Sea Basin (Western Mediterranean). Ph.D. Thesis Louisiana State University, Baton Rouge, p. 1-197.
(online at: https://digitalcommons.lsu.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=7792&context=gradschool_disstheses)
(Studies of Pliocene-Recent formation of foreland basin along Banda orogen at start of continental collision (Australian continental foreland) and Alboran Sea post-orogenic continental Miocene extensional basin)

Tandon, K., J.M. Lorenzo & G.W. O'Brien (2000)- Effective elastic thickness of the northern continental lithosphere subducting beneath the Banda orogen (Indonesia): inelastic failure at the start of continental subduction. Tectonophysics 329, p. 39-60.
(online at: http://www.geol.lsu.edu/jlorenzo/literature/Juan/papers_pdf/Tandon_Tectonophyscis2000_24.pdf)
(Pliocene-Recent Australian continent- arc collision from Roti to Kai created underfilled foreland basin in Timor-Tanimbar-Aru Trough. Collision most advanced near C Timor. Australian continental lithosphere N of Timor detached from oceanic lithosphere. Change in Effective Elastic Thickness (EET) at start of continental subduction at Mio- Pliocene boundary due to change in curvature of N Australian lithosphere near shelf-slope, in map and cross-section. Evidence for inelastic yielding of N Australian continental lithosphere near present-day shelf-slope at continental subduction: (1) maximum change of EET near shelf-slope in laterally variable EET calculations, and (2) cessation of most normal faulting in Late Miocene- E Pliocene on seismic)

Tandon, K., J.M. Lorenzo, S. Widiyantoro & G.W. O'Brien (2002)- Variations in inelastic failure of subducting continental lithosphere and tectonic development: Australia-Banda Arc convergence. In: S. Stein & J.T. Freymueller (eds.) Plate boundary zones, American Geophysical Union (AGU), Geodynamics Series 30, p. 341-357.
(online at: http://www.geol.lsu.edu/jlorenzo/literature/Juan/papers_pdf/Tandonetal_AGU.pdf)
(Effective Elastic Thickness map at incipient continental collision (Pliocene-Recent) along N Australian continental lithosphere along Banda orogen suggests more rigid N Australian lithosphere indenting between 125-127°E longitude. Sharp decrease in EET from 230-180 km on continental shelf (from Roti to W of Aru Island) down to ~40 km on continental slope and beneath Banda orogen favoring inelastic failure at start of continental subduction)

Taylor, D. & T.M. van Leeuwen (1980)- Porphyry-type deposits in Southeast Asia. In: S. Ishihara & S. Takenouchi (eds.) Granitic magmatism and related mineralization, Tokyo, Mining Geology, Special Issue 8, p. 95-116.
(14 porphyry copper or molybdenum deposits known from SE Asia outside Philippines; Sabah (Mamut), N and W Sulawesi (Tapadaa, Tombuililado, Sassak, Malala), Sumatra (Tangse + 4 non-economic; all associated with C Sumatra Fault Zone, Thailand (2; Triassic?)) and C Burma (Monywa). All except Thailand of Miocene and younger ages. Sabah and Sulawesi occurrences underlain by oceanic crust, similar to Philippines)

Thamrin, M. (1985)- An investigation of the relationship between the geology of Indonesian sedimentary basins and heat flow density. Tectonophysics 121, 1, p. 45-62.
(Geothermal data from 929 wells in 20 Tertiary basins. Thermal conductivity increases with depth of burial and compaction. T gradient controlled by depth and T of heat source beneath basin. High heat-flow densities in C Sumatra, S Sumatra, Salawati Basin and Bintuni Basin may be caused by shallow magmatic diapirism)

Thamrin, M. (1985)- Heat flow study in the oil basinal areas in Indonesia. United Nations ESCAP, CCOP, Technical Publication TP 15, p. 435-444.

Thamrin, M. (1986)- Terrestrial heat flow map of Indonesian Basins. Indonesian Petroleum Association (IPA), Jakarta, p. 33-70.

Thamrin, M. & P.H. Mey (1987)- Terrestrial heat flow map of Indonesian Basins. Indonesian Petroleum Association (IPA), Jakarta, p. 1-70.

Thamrin, M., Prayitno & Siswoyo (1984)- Heat flow study in the oil basinal areas in Indonesia. Proc. Joint ASCOPE/ CCOP Workshops I and II, p. 49-60.

Thurow, J. & J. Milsom & D. Roques (2000)- Mesozoic tectono-sedimentary evolution of the Banda Arc area. AAPG International Conference, American Assoc. Petroleum Geol. (AAPG) Bull. 84, 9, p. 1505-1506.
(Abstract only. Mesozoic on Buru, Buton, Seram, E Sulawesi and plateaus off NW Australian Shelf. Pre-collision sediments record complicated rift-drift-history from higher latitudes at NW Australian margin and include source and reservoir rocks (e.g. Triassic sandstone and platform carbonates/ black shales), some with oil, oil seeps, asphalt. Sediments represent rifting off NW Australia. Widespread condensed oceanic sediments with Late Jurassic macrofossils overlie them. This sequence may be preceded by basaltic volcanic phase. E Cretaceous sediments pelagic with abundant radiolaria. Late Cretaceous 'couches rouges' facies rich in calcareous plankton. First Eurasian microfauna in Maastrichtian, indicating beginning of collision. Mesozoic pelagic microfaunas of NW-Australia typical Austral affinities (high latitude); those from Banda Arc mixed Austral-Tethyan elements, deposited in subtropical environment)

Tjia, H.D. (1968)- New evidence of recent diastrophism in East Indonesia. Contributions Department of Geology, Institute of Technology Bandung (ITB) 69, p. 71-76.

Tjia, H.D. (1970)- Rates of diastrophic movement during the Quaternary in Indonesia. Geologie en Mijnbouw 49, 4, p. 335-338.
(online at: https://drive.google.com/file/d/0B7j8bPm9Cse0MWZtWTJsb0ZnT1U/view)
(In mobile regions of Indonesia average rate of Quaternary uplift, with or without attendant folding, 0.5- 1.0 mm/yr (common coral reefs uplifted to 500-1000m on Outer Arc islands like Sumba, Timor, Babar, Kai, Seram; also E Sulawesi, Buton, etc.). Subsidence occurs at rates of 2.0 mm/yr. Diastrophic movements in continental areas much slower. Wrench faulting most rapid movements, with rates of strike-slip of 5 mm/yr or more)

Tjia, H.D. (1973)- Displacement patterns of strike-slip faults in Malaysia- Indonesia- Philippines. Geologie en Mijnbouw 52, 1, p. 21-30.
(online at: https://drive.google.com/file/d/0B7j8bPm9Cse0Yjl3aHFCa0w1cE0/view)
(Field studies on 7 important strike-slip faults in Malay Peninsula, Sarawak, W Sumatra, W Java, C Sulawesi New Guinea and Seram, using fault-plane markings to determine the sense of displacement. Directions of regional compression, parallel to computed compressive stress directions. Directions of regional compression are 10°-190° (Sumatra and Java) and ~E-W for Philippines and islands E of Makassar Straits)

Tjia, H.D. (1978)- Active faults in Indonesia. Bull. Geological Society Malaysia 10, p. 73-92.
(online at: https://gsmpubl.files.wordpress.com/2014/09/bgsm1978006.pdf)
(Main known active faults in Indonesia: Sumatra Fault Zone (1600 km). Palu-Koro FZ, Sulawesi (700km), Irian FZ (1300km), central depression of Timor, Lembang Fault, W Java, Banyumas Depression of Java, active volcanoes and extensive limestone terrains (caving))

Tjia, H.D. (1981)- Examples of young tectonism in Eastern Indonesia. In: A.J. Barber & S. Wiryosujono (eds.) The geology and tectonics of Eastern Indonesia, Proc. CCOP-IOC SEATAR Working Group Meeting, Bandung 1979, Geological Research Development Centre (GRDC), Bandung, Special Publ. 2, Bandung, p. 89-104.
(Tectonic mobility of E Indonesia reflected in high topographic relief between mountainous islands (+5000m in W Papua) and adjacent deep oceanic sea floors (Weber Deep -7440m), zones of negative isostatic gravity

anomalies, volcanic arcs earthquake belts and major wrench fault zones. Also uplifted Pliocene-Recent reef terraces on many E Indonesian islands, up to +1293m on Timor, with long-term uplift rates of 3mm/year)

Tjia, H.D. (1983)- Earthquake stress directions in the Indonesian Archipelago. In: T.W.C. Hilde & S. Uyeda (eds.) Geodynamics of the western Pacific-Indonesian region, American Geophysical Union (AGU) and Geological Society of America (GSA) Geodynamics Series 11, p. 413-422.
(Compressive stresses of shallow earthquakes in 1929-1973 roughly perpendicular and occasionally parallel to structural grain of Sumatra, Lesser Sunda islands, Irian Jaya, Halmahera, and N-most Moluccas. East of the Makassar Straits 3-4 tectonic domains. Boundaries between domains are E-W striking Irian fault zone and NW trending Palu-Koro fault zone. Etc.)

Tjia, H.D. (1987)- Tectonics, volcanism and sea level changes during the Quaternary in Southeast Asia. In: N. Thiramongkol (ed.) Proc. Workshop on Economic geology, tectonics, sedimentary processes and environment of the Quaternary in Southeast Asia, Haid Yai, Thailand 1986, IGCP 218/ Chulalongkorn University, Bangkok, p. 3-21.
(online at: http://library.dmr.go.th/Document/Proceedings-Yearbooks/M_1/1986/5083...)
(Sundaland Holocene sealevel rise 2cm/year after last deglaciation, reaching 4m above present 6000 yrs ago. Vertical uplifts of coral reef terraces and abrasion surfaces in region up to ~1300m. 500 Quaternary volcanic centers identified, 130 active. Etc.)

Tjia, H.D. (1989)- Active tectonics in the Indonesian Archipelago. In: N. Thiramongkol (ed.) Proc. Workshop on Correlation of Quaternary successions in South, East and Southeast Asia, Bangkok, p. 165-185.

Tjia, H.D. (1991)- Active tectonics in the Indonesian Archipelago-2. Proc. 20th Annual Conv. Indonesian Association Geologists (IAGI), Jakarta, p. 281-300.
(online at: https://www.iagi.or.id/web/digital/49/20th-(10-12-Des-1991)-19.pdf)
(During Quaternary vertical displacement in Indonesian archipelago ranged from +2000m to -2000m). Most uplift vertical, as suggested by untilted appearance of most of highest terraces. Lateral slip movements response to convergence of SE Asia, India-Australia and Pacific plates. Influence of Pacific convergence reached W of Makassar Straits, Indian-Australian convergence only traceable in Java and Sumatra. Discussion of uplifted calcirudites at Banyuwangi, E Sulawesi raised reef terraces at Luwuk and Peleng island, etc.)

Tjia, H.D. (1998)- Meridian-parallel faults and Tertiary basins of Sundaland. Bull. Geological Society Malaysia 42, p. 101-118.
(online at: www.gsm.org.my/products/702001-100852-PDF.pdf)
(Pre-Tertiary core of Sundaland contains numerous N-S striking regional faults. In Malay Peninsula Thai-Bentong- Bengkalis FZ coincides with Raub-Bentong suture, which existed since M Triassic. N-S faults of Sundaland functioned as (1) originators/ initiators of Tertiary basins (Mekong, Nam Con Son), (2) determinants of basin location (C Thailand, Gulf of Thailand, Balam-Pematang Trough, BengkalisTrough, Benakat Gully, Asri, Seribu, Arjuna, basement depressions in Malacca Strait), and (3)modifiers of basin geometry (Peusangan fault in N Sumatra basin; dextral offsets of old series in Malay basin))

Tjia, H.D. (2001)- Wrench tectonics in Sundaland; subsurface and offshore evidence. In: G.H. Teh et al. (eds.) Geological Society of Malaysia Annual Geological Conference 2001, Pangkor Island, p. 71-77.
(online at: https://gsmpubl.files.wordpress.com/2014/10/agc2001_12.pdf)
(Wrenching widespread in Sundaland. Principal stress directions from wrench patterns, well-bore breakouts and major earthquakes show most of Sundaland currently subjected to N-S stress. Towards margins stress trajectories deviate due to convergence of adjoining megaplates and SE extrusion of Indosinia. Until onset of M Miocene most wrenching transtensional, forming pull-apart depressions and modifying structure of large depocenters. Cessation of spreading in Philippine Sea and Caroline basins by M Miocene changed wrenching into transpression, accompanied by slip-sense reversals and structural inversion)

Tjia, H.D. (2014)- Wrench-slip reversals and structural inversions: Cenozoic slide-rule tectonics in Sundaland. Indonesian J. on Geoscience (IJOG) 1, 1, p. 35-52.

(online at: https://ijog.geologi.esdm.go.id/index.php/IJOG/article/view/174/174)
(Sundaland Oligocene transtension evolves into post-E Miocene transpression at Langhian time (~17-15.5Ma), after end of S China sea spreading)

Tjia, H.D., S. Fujii, K. Kigoshi, A. Sugimura & T. Zakaria (1972)- Radiocarbon dates of elevated shorelines, Indonesia and Malaysia. Part 1. Quaternary Research 2, 4, p. 487-495.
(Four radiocarbon dates of elevated strandlines in tectonically active areas of E Indonesia and E Malaysia indicate uplift rates between 4.5- 9 mm/ year during past 24,000 yr. Data from S arm of Sulawesi indicate rates of uplift of 1.4-2.5 mm/ year. At Langkawi islands, W Malaysia, one of regionally common shorelines at 2 m above sea level dated at 2590 ± 100 yr BP)

Tjia, H.D., S. Fujii, K. Kigoshi, A. Sugimura & T. Zakaria (1974)- Late Quaternary uplift in Eastern Indonesia. Tectonophysics 23, 4, p. 427-433.
(Radiocarbon dates of 15 samples from raised shorelines on various islands of E Indonesia suggest rates of tectonic uplift up to 12.5 mm/year)

Tjia, H.D. & K.K. Liew (1996)- Changes in tectonic stress field in northern Sunda Shelf basin. In: R. Hall & D. Blundell (eds.) Tectonic Evolution of Southeast Asia, Geological Society, London, Special Publ. 106, p. 291-306.
(Tertiary basins of N Sunda Shelf underlain by normal and attenuated continental crust with moderate- high geothermal gradients >5°C/100 m. In Malay basin, U Oligocene and younger sediments >12 km thick; other basins, 4-8 km thick. Malay, Penyu and W Natuna basins are aulacogens meeting at triple junction that marks Late Cretaceous hot spot in center of Malay Dome. Sub-basins developed as pull-apart basins within regional, N-NW striking, wrench fault zones. Initial basin subsidence Eocene-Oligocene, with extension prevailing until E Miocene. M-Late Miocene regional compression caused inversions of basin-fill. Some N-striking wrench faults indications of up to 45 km right-lateral displacement, possibly post-Miocene)

Tsuboi, C (1957)- Crustal structure along a certain profile across the East Indies as deduced by a new calculation method. Verhandelingen Kon. Nederlands Geologisch Mijnbouwkundig Genootschap, Geologische Serie 18 (Gedenkboek Vening Meinesz), p. 295-304.

Umbgrove, J.H.F. (1930)- Tertiary sea-connections between Europe and the Indo-Pacific area. Proc. Fourth Pacific Science Congress, Java 1929, IIA, p. 91-104.
(On similarities and differences between Indo-Pacific and European Tertiary faunas. Similarities suggest open sea connections in M Eocene, no connection in Late Eocene, and some faunal interchange of fauna in Oligocene and later)

Umbgrove, J.H.F. (1932)- Het Neogeen in den Indischen Archipel. Tijdschrift Koninklijk Nederlands Aardrijkskundig Genootschap (2) 49, 6, p. 769-834.
(online at: https://resolver.kb.nl/resolve?urn=MMUBA13:001678001:pdf)
'The Neogene in the Indies Archipelago'. Substantial review of Neogene stratigraphy in Indonesia, with comments on 163 areas. Neogene sediments highly variable in thickness and intensity and timing of deformation. With map showing 11 Neogene tectostratigraphic regions A-M)

Umbgrove, J.H.F. (1933)- Verschillende typen van Tertiaire geosynclinalen in den Indischen archipel. Leidsche Geologische Mededelingen 6, 1, p. 33-43.
(online at: https://repository.naturalis.nl/pub/505939/LGM1933006001003.pdf)
('Different types of Tertiary geosynclines in the Indies Archipelago'. Tertiary basins of Sumatra, Java and Kalimantan relatively rapid subsidence and sedimentation. Most of fill is neritic with some hemipelagic sediments, but no abyssal sediments. Subsidence and sedimentation starts in continental areas with fluvial-alluvial deposits. Tertiary basins not connected 'geosynclines', but rel. independent basins)

Umbgrove, J.H.F. (1934)- Tijd en type der tertiaire plooiingen binnen de zone van sterk negatieve afwijkingen der zwaartekracht in den Indischen archipel. Tijdschrift Koninklijk Nederlands Aardrijkskundig Genootschap (2) 51, 1, p. 20-34.
(online at: https://resolver.kb.nl/resolve?urn=MMUBA13:001682001:pdf)
('Timing and types of Tertiary folding in zone of negative gravity anomalies in the Indies Archipelago'. Discussion of timing and styles of Tertiary folding in E Indonesian islands, many of which show evidence of folding episode between Eocene Tb or Td and-Early Miocene Te5 (Timor, Seram, Buru, etc.). With information on Tanimbar and Kai stratigraphy from unpublished works by F. Weber (BPM) and H. Terpstra. Kai and Tanimbar Islands and East Sulawesi main folding after Te5? (E Miocene))

Umbgrove, J.H.F. (1934)- The relation between geology and gravity field in the East Indian Archipelago. In: F.A. Vening Meinesz (1934), Gravity expeditions at sea 1923-1932, Waltman, Delft, 2, Chapter 6, p. 140-162.
(online at: www.ncg.knaw.nl/Publicaties/Groen/pdf/04VeningMeinesz.pdf)

Umbgrove, J.H.F. (1934)- A short survey of theories on the origin of the East Indian Archipelago. In: F.A. Vening Meinesz (1934), Gravity expeditions at sea 1923-1932, Netherlands Geodetic Commision, Waltman, Delft, 2, Chapter 7, p. 163-182.
(online at: www.ncg.knaw.nl/Publicaties/Groen/pdf/04VeningMeinesz.pdf)
(Review of the more than two dozen theories proposed for origin of Indonesian archipelago since early 1900's)

Umbgrove, J.H.F. (1935)- Over het ontstaan van den Indischen Archipel. Tijdschrift Koninklijk Nederlands Aardrijkskundig Genootschap II, 52, p. 17-24.
(online at: https://resolver.kb.nl/resolve?urn=MMUBA13:001683001:pdf)
('On the origin of the Indies Archipelago'. Brief discussion on origin of Indonesian archipelago, mainly focused on gravity anomaly belts of Vening Meinesz. No new model proposed, but is skeptical about 'continental drift theory' of Wegener. With regional gravity anomaly map)

Umbgrove, J.H.F. (1935)- De Pretertiaire historie van den Indischen Archipel, met bijdragen van Dr. Friedr. Weber. Leidsche Geologische Mededelingen 7, p. 119-155.
(online at: www.repository.naturalis.nl/document/549307)
('The Pre-Tertiary history of the Indies Archipelago, with contributions from (Swiss BPM geologist) Dr. Friedrich Weber'. Review of Paleozoic-Mesozoic rocks in Indonesian Archipelago. With small distribution maps of Triassic, Jurassic, Cretaceous fossils, and with important map + table (Figs. 5-6), showing grouping into 7 different Mesozoic tectonostratigraphies A-G (including A- Timor- East Celebes geosyncline with near-continuous Permian- Eocene marine facies, now known to represent dispersed remnants of Mesotethys suture-JTvG))

Umbgrove, J.H.F. (1938)- On the time of origin of the submarine relief in the East Indies. Comptes Rendus Congres Int. Geographie, Amsterdam 1938, Brill, Leiden, 2, p. 150-159.
(online at: https://resolver.kb.nl/resolve?urn=MMKB06:000004273:pdf)
(Like Kuenen (1935) and others, the present-day deep sea basins of Eastern Indonesia are believed to have formed recently by the subsidence of 'continental (sialic) area))

Umbgrove, J.H.F. (1938)- Geological history of the East Indies. American Assoc. Petroleum Geol. (AAPG) Bull. 22, 1, p. 1-70.
(Classic overview of geologic evolution Indonesian archipelago, with maps of tectonostratigraphic provinces from Permian- Eocene)

Umbgrove, J.H.F. (1949)- Structural history of the East Indies. Cambridge University Press, p. 1-63.
(online at: https://archive.org/details/in.ernet.dli.2015.85833)
(Elegant overview of Indonesian seas, deep sea basins, volcanoes, structural zones, etc., with series of broad paleogeographic maps)

Umbgrove, J.H.F. (1950)- The origin of deep-sea troughs in the East Indies (with discussion). International Geological Congress 18th Session, Great Britain 1948, 8, p. 73-80.
(Pre-plate tectonic explanation of origin of deep sea trenches by 'downbuckling of crust')

Untung, M. (1996)- Geoscientific study along Jawa-Kalimantan-Sarawak-South China Sea transect. In: G.P. & A.C. Salisbury (eds.) Trans. 5th Circum-Pacific Energy and Mineral Resources Conference, Honolulu 1990, Gulf Publishing, Houston, p. 163-183.
(W Borneo tectonically active from Triassic- Late Cretaceous. CCW rotation of ~90° since then. Tectonic activity resulted in uplift and erosion of basement rocks, formation of melange (Boyan, Lubok Antu), followed by sedimentation of shallow marine deposits and magmatism. In Java tectonic activities only since Late Cretaceous (Luk-U1o Melange). Etc.)

Untung, M. & B.C. Barlow (1981)- The gravity field of Eastern Indonesia. In: A.J. Barber & S. Wiryusujono (eds.) The geology and tectonics of East Indonesia. Geological Research Development Centre (GRDC), Bandung, Special Publ. 2, p. 53-63.
(Incl. strong E-W trending gravity gradient along N coast Irian Jaya, etc.)

Vacquier, V. (1984)- Oil fields- a source of heat flow data. Tectonophysics 103, p. 81-98.
(Heat flows somewhat elevated in Tertiary basins of W Indonesia, with values decreasing from 130 mW/m2 in C Sumatra to 70 mW/m2 in E Kalimantan)

Vanacore, E., F. Niu & H. Kawakatsu (2006)- Observations of the mid-mantle discontinuity beneath Indonesia from S to P converted waveforms. Geophysical Research Letters 33, L04302, p. 1-4.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2005GL025106)
(Data from nine deep earthquakes confirmed existence of mid-mantle discontinuity beneath Java arc and also revealed its presence N to Kalimantan. S to P waves converted at discontinuity at depth range ~1080 km in W to ~930 km in E)

Van Bemmelen, R.W. (1931)- De bicausaliteit der bodembewegingen. Natuurkundig Tijdschrift voor Nederlandsch-Indie 91, 3, p. 363-413.
(online at: https://www.delpher.nl/nl/tijdschriften/view?identifier=MMTEY01:179530001:00009 Etc.))
('The double causes of ground movements'. Preliminary unveiling of Van Bemmelen's 'undation theory', a tectonic theory that is variation of the oscillation-theory of Haarmann, but never found much acceptance. Crystallization processes in upper mantle trigger uplift ('geotumors'), subsidence and outward flows to re-establish hydrostatic equilibrium)

Van Bemmelen, R.W. (1932)- De undatie-theorie (hare afleiding en toepassing op het westelijk deel van de Soenda boog). Natuurkundig Tijdschrift voor Nederlandsch-Indie 92, 1, p. 85-242.
(online at: https://www.delpher.nl/nl/boeken/view?identifier=MMKB24:063529000:00001)
(Principal unveiling of Van Bemmelen's 'undation theory' and its application to the W part of the Sunda orogenic arc. With discussion of deep tectonic processes and also of geology of S Sumatra. See also critical discussion by Van Tuijn and Westerveld (1932))

Van Bemmelen, R.W. (1932)- Nadere toelichting der undatie-theorie. Natuurkundig Tijdschrift voor Nederlandsch-Indie 92, 2, p. 373-402.
('Clarifying comments on the undation-theory'. Reply to critical comments of Van Tuijn & Westerveld (1932))

Van Bemmelen, R.W. (1933)- Versuch einer geotektonischen Analyse Sudostasiens nach der Undationstheorie. Proc. Koninklijke Nederlandse Akademie van Wetenschappen, Amsterdam, 36, 7, p. 730-739.
(online at: https://dwc.knaw.nl/DL/publications/PU00016473.pdf)
('Attempt at a geotectonic analysis of SE Asia after the undation theory'. Historically interesting, but otherwise very controversial interpretation of SE Asia tectonics)

Van Bemmelen, R.W. (1933)- Versuch einer geotektonischen Analyse Australiens und des Sudwestpazifik nach der Undationstheorie. Proc. Koninklijke Nederlandse Akademie van Wetenschappen, Amsterdam, 36, 7, p. 740-749.
(online at: https://dwc.knaw.nl/DL/publications/PU00016473.pdf)
('Attempt at a geotectonic analysis of Australia and the SW Pacific after the undation theory'. Historically interesting, but otherwise very controversial interpretation of Australia-Pacific tectonics)

Van Bemmelen, R.W. (1933)- Die Neogene Struktur des Malaysischen Archipels nach der Undationstheorie. Proc. Koninklijke Nederlandse Akademie van Wetenschappen, Amsterdam, 36, 10, p. 888-897.
(online at: https://dwc.knaw.nl/DL/publications/PU00016473.pdf)
('The Neogene structure of the Malay Archipelago after the undation theory'. Historically interesting, but otherwise very controversial interpretation of Indonesia tectonics)

Van Bemmelen, R.W. (1933)- Moderne richtingen in de geotektoniek (in verband met de geotektonische positie van den Nederlandsch-Indischen archipel. De Mijningenieur 14, 12, p. 205-212.
('Modern theories in geotectonics (in relation to the geotectonic position of the Netherlands Indies archipelago'. Discussion of tectonic theories. At that time in the Indonesian region were several supporters of the Wegener/ Holmes-inspired 'mobilist' school (Vening Meinesz, Escher, Umbgrove, Smit Sibinga), while Van Bemmelen with his undation theory is firmly in 'fixist' camp)

Van Bemmelen, R.W. (1935)- Over het karakter der jongtertiaire ertsgangen in den vulkanischen binnenboog van het Soenda systeem. Geologie en Mijnbouw 14, 4, p. 21-25.
(online at: https://drive.google.com/file/d/1YydzhGQK3nsnG_MkVDjsU0QQB5CrNviF/view)
('On the nature of the young Tertiary ore veins in the volcanic inner arc of the Sunda system'. During M-U Miocene, Sunda Mountain system became' geanticlinal'. Associated intrusions of granitoid batholiths caused gold-silver mineralization. No figures)

Van Bemmelen, R.W. (1935)- Uber die Deutung der Schwerkraft-Anomalien in Niederlandisch Indien. Geologische Rundschau 26, 3, p. 199-226.
('On the significance of the gravity anomalies in the Netherlands Indies'. Belt of negative gravity anomalies identified by Vening Meinesz and explained by him as downwarping/ buckling of light sialic crust thought to be better explained with Van Bemmelen's 'undation theory')

Van Bemmelen, R.W. (1936)- Kritische beschouwingen naar aanleiding van Bijlaard's theorie over plastische defomaties van de aardkorst. De Ingenieur in Nederlandsch-Indie (I) 3, 7, p. I.87- I.93.
(online at: https://www.stichtingblauwelijn.nl/assets/files/1936-07.pdf)
('Critical discussion of Bijlaard's theory on plastic deformations of the Earth's crust')

Van Bemmelen, R.W. (1936)- Geologische contra mechanische analyse der geotektoniek (Geologische bezwaren tegen Bijlaard's theorie der lokal, plastische deformaties van de aardkorst). De Ingenieur in Nederlandsch-Indie 3, 11, p. I.150- I.160.
('Geological versus mechanical analysis of geotectonics (Geological objections against Bijlaard's theory of local plastic deformations of the Earth's crust)'. Second part of discussion between Van Bemmelen and Bijlaard on tectonic theory for Indonesian region)

Van Bemmelen, R.W. (1937)- De isostatische anomalieen in den Indischen Archipel. De Ingenieur in Nederlandsch-Indie (IV) 4, 2, p. IV.9- IV.29.
(online at: https://www.stichtingblauwelijn.nl/assets/files/1937-02.pdf)
('The isostatic anomalies in the Indies Archipelago'. Discussion of models explaining belts of negative gravity anomalies by crustal downbuckling (Vening Meinesz, Bijlaard, Umbgrove, Kuenen). These models do not explain observed asymmetric thrust tectonics. Van B proposes alternative 'fixist' 'undation theory')

Van Bemmelen, R.W. (1938)- The distribution of the regional isostatic anomalies in the Malayan Archipelago. De Ingenieur in Nederlandsch-Indie (IV) 5, 4, p. IV.61- IV.67.

(online at: https://www.stichtingblauwelijn.nl/assets/files/1938-04.pdf)
(Review of regional gravity anomalies and apparent relations to deep-focus earthquakes, with interpretation in terms of Van Bemmelen's favorite 'undation theory')

Van Bemmelen, R.W. (1939)- Gravitational tectogenesis in the Soenda Mountain system. Proc. 17th International Geological Congress, Moscow 1937, 2, p. 361-382.

Van Bemmelen, R.W. (1949)- The geology of Indonesia, vol. 1A, General geology of Indonesia and adjacent archipelagoes. Government Printing Office, The Hague, p. 1-732.
(also in 1970 reprint edition by Martinus Nijhoff Publishers, with updated references list)
(Classic, monumental overview of pre-WWII knowledge of Indonesia geology, in 3 volumes. Still the most comprehensive compilation of geology of region. Excellent documentation of state of knowledge of regional geology and stratigraphy of Indonesia at end of colonial period, although many of vB's tectonic interpretations using the 'undation theory' model have always been controversial and are now outdated)

Van Bemmelen, R.W. (1949)- The geology of Indonesia, vol. 1B, Portfolio. Government Printing Office, (Martinus Nijhoff), The Hague.
(Box set of 41 plates and Literature references list, accompanying vol. 1A)

Van Bemmelen, R.W. (1949)- The geology of Indonesia, vol. 2, Economic geology. Government Printing Office (Martinus Nijhoff), The Hague, p. 1-265.
(Comprehensive review of deposits of oil, coal, metals, industrial minerals in Indonesia, as known in 1949)

Van Bemmelen, R.W. (1950)- On the origin of igneous rocks in Indonesia. Geologie en Mijnbouw 12, 7, p. 207-220.
(online at: https://drive.google.com/file/d/1VmYPZcRfi805lErwX2tKGVTeF7M89i6j/view)
(On relationships between igneous rock types and tectonic settings. Rather outdated ideas)

Van Bemmelen, R.W. (1950)- Gravitational tectogenesis in Indonesia. Geologie en Mijnbouw 12, 12, p. 351-361.
(online at: https://drive.google.com/file/d/1wRMmVn3SPhsuaGvt1Sezvz2B-GtkN9Ev/view)
(Similar title to Van Bemmelen 1939. Only vertical movements are result of endogenic forces; all other tectonic forces are reactions to gravitation: (1) 'epidermal (within sedimentary cover: slumping, volcano-tectonic collapse (Tambakan Ridge folding N of Bandung), free gliding (Karangkobar, C Java, Seram, Timor, Jambi nappes), compressive settling in lows (Samarinda anticlinorium in E Kalimantan, Kendeng zone in E Java), etc.), (2) 'dermal' (includes crystalline crust; Flores, Npart of southern mountains from Lombok to W Java), (3) bathydermal' (sidewards displacement mainly in lower crust; Sunda Straits) and (4) subcrustal (sideward displacements in base of crust or deeper). With examples from Indonesia)

Van Bemmelen, R.W. (1951)- De geologie van Indonesie. Natuurkundige Voordrachten, Nieuwe Reeks 29, Maatschappij Diligentia, Van Stockum, The Hague, p. 17-36.
(online at: https://natuurwetenschappen-diligentia.nl/wp-content/uploads/2020/02/Diligentia_jaarboek_29.pdf)
(Summary of March 1951 lecture on the geology of Indonesia)

Van Bemmelen, R.W. (1952)- De geologische geschiedenis van Indonesie. Van Stockum, Den Haag, p. 1-139.
(online at: https://lib.ui.ac.id/file?file=digital/20379081-De%20geologische%20geschiedenis uan%20indonesie,%201952.pdf)
('The geological history of Indonesia'. Popular summary of Indonesia geological evolution)

Van Bemmelen, R.W. (1953)- Relations entre le volcanisme et la tectogenese en Indonesie. Bulletin of Volcanology (Bulletin Volcanologique), ser. II, 13, p. 57-62.
('Relations between volcanism and tectonics in Indonesia'. Summary of a 1951 lecture in Brussels. Uses Sunda Arc region as examples, but not much detail)

Van Bemmelen, R.W. (1954)- Mountain building; a study primarily based on Indonesia region of the world's most active deformations. Martinus Nijhoff, The Hague, p. 1-177.
(Pre-plate tectonics text book on mountain building, primarily based on Indonesian geology and interpreted mainly in terms of the controversial 'undation theory'. Two parts: 'Principles of mountain building' (p. 1-35) and 'The orogenic evolution of the Earth's crust in Indonesia' (p. 36-167))

Van Bemmelen, R.W. (1954)- The geophysical contrast between orogenic and stable areas. Geologie en Mijnbouw 16, 8, p. 326-334.
(online at: https://drive.google.com/file/d/0B7j8bPm9Cse0QzA4cUJzVmlrNGM/view)
(Extended commentary of Collette (1954) thesis 'On the gravity field of the Sunda region'. Includes chapter on interpretation of gravity field of West Indonesia. Positive anomaly with steep gradients over Wijnkoopsbaai (Ciletuh Bay) on Profile VI probably results from ophiolithic high-density rocks near surface. Belt of negative anomalies over Kendeng zone of NE Java result of either bending down of crust and filling with low-density sediments or small asthenolithic blisters at base of sialic crust. Etc. With Collette reply)

Van Bemmelen, R.W. (1955)- L'evolution orogenetique de la Sonde (Indonesie). Bull. Societe Belge Geologie Paleontologie Hydrologie 64, 1, p. 124-152.
('The orogenetic evolution of Indonesia'. Another overview of Indonesia tectonic evolution in terms of Van Bemmelen's'undation theory')

Van Bemmelen, R.W. (1965)- Mega-undations as the cause of continental drift. Geologie en Mijnbouw 44, 9, p. 320-333.
(online at: https://drive.google.com/file/d/0B7j8bPm9Cse0N3RER1RoZ0J2d1E/view)
(Modification in Van Bemmelen's 'unique' tectonic views, now allowing some mobilism in his previously fixist 'undation theory'. Where 'mega-undations' (large mantle-driven uplifts) occur in continental areas, such as Gondwana, new oceanic basins will open up above a 'basaltic blister', with mid-oceanic rifts forming on crest by 'oceanization'. Overlying units drift sidewards under gravity, towards 'mega-undatory downwarps'. Controversial and not much on SE Asia)

Van Bemmelen, R.W. (1965)- The evolution of the Indian Ocean mega-undation (causing the Indico-fugal spreading of Gondwana fragments). Tectonophysics 2, 1, p. 29-57.
(online at: http://igitur-archive.library.uu.nl/geo/2006-1215-204156/bemmelen_65_evolution.pdf)

Van Bemmelen, R.W. (1976)- Plate tectonics and the undation model. Tectonophysiscs 32, p. 145-182.
(One of later papers by Van Bemmelen on his undation theory', first proposed by him in 1931, but debated from start and never found general acceptance. Unlike the vast majority of the scientic community, Van Bemmelen never accepted plate tectonics theory or subduction)

Van Bemmelen, R.W. (1978)- The present formulation of the undation theory. Zeitschrift Geologische Wissenschaften 6, 6, p. 523-540.
('Final?' review of Van Bemmelen's Undation theory, with short summary how it drives Indonesian tectonics)

Van der Voo, R. (1993)- Paleomagnetism of the Atlantic, Tethys and Iapetus Oceans. Cambridge University Press, p. 1-411.
(Extensive review of global paleomagnetic data, including Sibumasu, Borneo, E Indonesia, etc. Misool-Timor probably not continuously part of Australian Plate: Misool paleolatitudes 10-20° lower than predicted if remained with Australia. Good paleomagnetic data set for Borneo suggests all paleolatitudes close to Equator. Large rotations suggested for Cretaceous of Sumba and Timor, etc.)

Van Es, L.J.C. (1918)- De voorhistorische verhoudingen van land en zee in den Oost-Indischen Archipel, en de invloed daarvan op de verspreiding der diersoorten. Jaarboek Mijnwezen Nederlandsch Oost-Indie 45 (1916), Verhandelingen 2, p. 255-304.
('The prehistoric relationships of land and sea in the East Indies Archipeago and its influence on the distribution of the animal species'. Pliocene paleogeography of Indonesian archipelago)

Van Es, L.J.C. (1919)- De tektoniek van de westelijke helft van de Oost Indische Archipel. Jaarboek Mijnwezen Nederlandsch Oost-Indie 46 (1917), Verhandelingen 2, p. 15-144.
('The tectonics of the western half of the East Indies Archipelago'. Synthesis of Western Indonesia geology as known in 1917. With 4 map sheets)

Van Es, L.J.C. (1930)- Beschouwingen over een nieuwe geotektonische kaart van Nederlandsch-Indie. De Mijningenieur 11, p. 1-32.
('Comments on a new geotectonic map of the Netherlands Indies'. Critical discussion of new tectonic map of Indonesia by Zwierzycki (1929-1930))

Van Hinte, J.E., T.C.E. van Weering & A.R. Fortuin (eds.) (1989)- Proceedings of the Snellius II Symposium, Geology and geophysics of the Banda Arc and adjacent areas, Jakarta 1987, vol. 1. Netherlands J. of Sea Research 24, 2-3, p. 93-381.
(Volume one of Jakarta 1987 Snellius II conference proceedings)

Van Hinte, J.E., T.C.E. van Weering & A.R. Fortuin (eds.) (1989)- Proceedings of the Snellius II Symposium, Geology and geophysics of the Banda Arc and adjacent areas, Jakarta 1987, vol.2. Netherlands J. of Sea Research 24, 4, p. 383-622.
(Volume two of Jakarta 1987 Snellius II conference proceedings)

Van Kampen, P.N. (1909)- De zoogeografie van den Indischen Archipel. Natuurkundig Tijdschrift voor Nederlandsch-Indie, Bijblad 3-4, Weltevreden, p.
('The zoogeography of the Indies Archipelago'. Review of earlier work. Argues that Wallace's line has no value as a zoogeographic boundary: 'Indian animals in many cases reach to E of it, while Australian forms do not reach out to it, so naturally do not cross it'. With small maps showing E and W limits of animal groups)

Van Kampen, P.N. (1911)- The zoogeography of the East Indian Archipelago. The American Naturalist 45, 537, p. 537-560
(online at: https://www.journals.uchicago.edu/doi/pdf/10.1086/279235)
(English translation of Van Kampen (1909), above. Considerable faunistic differentiation between W ('Asian') and E ('Australian') halves of Indo-Australian archipelago has long been known to exist, perhaps most evident amongst mammals. Celebes received its fauna from S, N and E, but not directly from Borneo. Etc.)

Van Tuijn, J. & J. Westerveld (1932)- Opmerkingen naar aanleiding der 'undatie theorie' van Bemmelen en hare toepassing op het westelijk deel van de Soendaboog. Natuurkundig Tijdschrift voor Nederlandsch-Indie 92, p. 341-372.
(online at: http://62.41.28.253/cgi-bin/)
(Critical review of Van Bemmelen's (1932) new tectonic 'undation theory' and its application to the western part of the Sunda Arc. With discussion of Sumatra geology, which is not believed to fit 'undation theory')

Vening Meinesz, F.A. (1930)- Maritime gravity survey in the Netherlands East Indies, tentative interpretation of provisional results. Proc. Koninklijke Nederlandse Akademie van Wetenschappen, Amsterdam, 33, p. 566-577.
(online at: https://dwc.knaw.nl/DL/publications/PU00015922.pdf)
(First account of Vening Meinesz' well-known shipboard (submarine) gravity work in Indonesia, after spending 8 months on Dutch Navy submarines, starting with theHr. Ms. K II in 1923, followed by the K XIII expedition in 1926. Principal gravity anomaly discovered is 'Axis of Vening Meinesz', a ~100 miles wide narrow strip of strong negative anomalies through whole archipelago (W of Sumatra, S of Java, islands of Timor, Tanimbar, Kei, Seram, then to North), bordered at both sides by fields of positive anomalies. With map of ship traverses and stations, and axis of negative gravity anomalies)

Vening Meinesz, F.A. (1931)- Releve gravimetrique maritime de l'Archipel Indien. Relation entre l'intensite de la pesanteur et l'activite tectonique de 'ecorce terrestre. Publ. Commission Geodesique Neerlandaise, Waltman, Delft, p. 1-6.

(online at: https://resolver.kb.nl/resolve?urn=MMKB24:075637000:pdf)
('Marine gravity survey of the Indies Archipelago. Relationship between the intensity of gravity and the tectonic activity of the Earth's crust'. French summary of Vening Meinesz' marine gravity work in the Netherlands Indies)

Vening Meinesz, F.A. (1931)- Gravity anomalies in the East Indian Archipelago. The Geographical Journal 77, 4, p. 323-332.
(Summary of lecture for Royal Geographical Society in London on discovery of remarkable strip of negative gravity anomalies during 16,000 miles voyage across Indonesia with Dutch Navy submarine K XVIII in 1930. This led to hypothesis that the crust undergoes a downward folding along this line". With map of traverses)

Vening Meinesz, F.A. (1932)- Gravity expeditions at sea 1923-1930, Vol. I. The expeditions, the computations and the results. Netherlands Geodetic Commision, Waltman, Delft, p. 1-109.
(online at: www.ncg.knaw.nl/Publicaties/Groen/pdf/03VeningMeinesz.pdf)
(First report on marine gravity expeditions in Dutch Navy submarines, sponsored by the Netherlands Geodetic Commission during 1923-1930. Much of focus was on Indonesian waters, but also included crossings of the Atlantic and Pacific Oceans. (An American expedition, organized by the U.S. Navy in cooperation with the Carnegie Institution of Washington, was also conducted in October-November 1928 in the Caribbean))

Vening Meinesz, F.A. (1933)- The mechanism of mountain-formation in geosynclinal belts. Proc. Koninklijke Nederlandse Akademie van Wetenschappen, Amsterdam 36, p. 372-377.
(online at: https://dwc.knaw.nl/DL/publications/PU00016417.pdf)
(Speculation on process of mountain building, mainly driven by VM's observation of long belts of highly negative gravity anomalies and associated earthquake centra in Indonesian region. Apparent crustal downbuckling and associated folding-thrusting are early stages of alpine-style mountain building. 'Probable that the earth's crust is pushing laterally under the islands of the Indonesia orogenic belt'. (No figures)

Vening Meinesz, F.A. (1934)- De ontstaangeschiedenis van den Nederlandsch-Indischen Archipel in het licht van het zwaartekrachtsonderzoek met Hr. Ms. K. XIII. Natuurkundige Voordrachten, Nieuwe Reeks 12, Maatschappij Diligentia, Van Stockum, The Hague, p. 51-61. *(online at: https://natuurwetenschappen-diligentia.nl//wp-content/uploads/2020/02/Diligentia_jaarboek_12.pdf)*
(Summary of 1933 lecture on tectonic history of the Netherlands Indies, in the light of new gravity data collected during the 8-month journey of the Navy submarine K.XIII from the Netherlands through the Panama Canal to Indonesia in 1929-1930. Points out remarkable belts of negative gravity anomalies (with parallel belts of volcanoes and earthquakes) that suggest buckling of crust. The deep Banda basin result of very young subsidence. Etc. No figures)

Vening Meinesz, F.A. (1934)- Gravity expeditions at sea 1923-1932, Vol. II. The interpretation of the results. Publication of Netherlands Geodetic Commision, Waltman, Delft, p. 1-208.
(online at: https://www.ncgeo.nl/downloads/04VeningMeinesz.pdf)
(Includes chapters VI on 'The relation between geology and gravity field in the East Indian Archipelago' (Umbgronve, p. 140-162), Chapter VII 'A short survey of theories on the origin of the East Indian Archipelago' by Umbgrove (p. 163-182) and Chapter VIII. 'Relations between submarine topography and gravity field' by Kuenen (p. 183-194))

Vening Meinesz, F.A. (1934)- Interpretation of the gravity anomalies in the Netherlands East Indies. In: F.A. Vening Meinesz (1934), Gravity expeditions at sea 1923-1932, II. The interpretation of the results., Netherlands Geodetic Commision, Waltman, Delft, Chapter 5, p. 116-139.
(online at: www.ncg.knaw.nl/Publicaties/Groen/pdf/04VeningMeinesz.pdf)
(One of first Indonesia-wide gravity anomalies maps. Control density is limited, but clearly shows belts of negative anomalies outlining accretionary wedge belts, maximum positive anomalies for oceanic basins, etc. First paper to suggest trenches with their negative anomalies are site of seafloor 'downbuckling', later understood as subduction)

Vening Meinesz, F.A. (1939)- De theorie van Wegener. Tijdschrift Koninklijk Nederlands Aardrijkskundig Genootschap 56, p. 453-457.
('The theory of Wegener'. Geophysical work in Netherlands Indies and other regions no clear data to support or negate the Wegener theory of continental drift (Vening Meinesz was originally a supporter of the Continental Drift Theory, untilresults of his own gravity work in the Indies demonstrated rigidity of oceanic crust, and thus making it unlikely that continental blocks would float across it. The 1960s discoveries of subduction and plate tectonics solved that problen- JTvG)

Vening Meinesz, F.A. (1940)- The earth's crust deformation in the East Indies. Proc. Koninklijke Nederlandse Akademie van Wetenschappen, Amsterdam 43, 3, p. 278-293.
(online at: https://dwc.knaw.nl/DL/publications/PU00017410.pdf)
(New regional isostatic gravity anomaly map of Indonesia. Shift of axis of Sunda-Banda trench minimum gravity zone between Sumba and Timor)

Vening Meinesz, F.A. (1941)- Gravity expeditions at sea 1934-1939, Vol. III. The expeditions, the computations and the results. Netherlands Geodetic Commision, Waltman, Delft, p. 1-97.
(online at: https://resolver.kb.nl/resolve?urn=MMKB31:033000000:pdf)
(Results of marine gravity expeditions of the Netherlands Geodetic Commission in 1934-1939. Largest voyage was an 8-month trip in 14 November 1934- 11 July 1935 with Navy submarine Hr. Ms. K 18 from the Netherlands to Java, via Buenos Aires, Cape Town, Mauritius and Fremantle (W Australia), during which the sub made >220 dives, and Vening Meinesz also conducted land gravity measurements. No interpretations in this volume)

Vening Meinesz, F.A. (1946)- Deep focus and intermediate earthquakes in the East Indies. Proc. Koninklijke Nederlandse Akademie van Wetenschappen, Amsterdam 49, 8, p. 855-865.
(online at: https://dwc.knaw.nl/DL/publications/PU00015922.pdf)
(Earthquake centers in 3 groups: (1) shallow (<60 km) in rigid crust and mostly in tectonically active areas; (2) intermediate shocks at depths of 60-300 km, and (3) deep shocks between 300-700 km. In many cases these centers are more or less located in inclined planes cutting surface in belts of strong tectonic activity. No deep shocks in Sumatra area. Deep earthquakes tied to convection currents in mantle)

Vening Meinesz, F.A. (1948)- Gravity expeditions at sea, 1923-1938, Vol. 4, Complete results with isostatic reduction, Interpretation of the results. Nederlandse Commissie voor Geodesie, Waltman, Delft, p. 1-233.
(online at: https://ncgeo.nl/index.php/en/publicatiesgb/green-series/item/2328-gs-9-f-a-vening-meinesz-gravity-expeditions-at-sea-1923-1938-vol-iv)
(Includes most recent report on Netherlands Indies gravity results, including data from the K-XVIII expedition in 1935 (chapters 2, 3))

Vening Meinesz, F.A. (1954)- Indonesian archipelago- a geophysical study. Geological Society of America (GSA) Bull. 65, 2, p. 143-164.
(Paper on belts of strong negative gravity anomalies and VM's theory of 'crustal downbuckling' (which came close to recognizing subduction). Main tectonic arcs of Indonesia caused by SSE movement of inner crustal block relative to crust outside arc and, for second tectonic arc, by movement of a NE block in E direction. Mantle convection currents may account for relative block movements and crustal compression and also explain deep and intermediate earthquake foci, the sinking of deep basins, etc. North Makassar Straits, Celebes Sea and N and S Banda Seas positive isostatic anomalies of +50- +100 mgal (remarkably, no mention of Van Bemmelen interpretations and theories))

Verbeek, R.D.M. (1900)- Voorlopig verslag over eene geologische reis door het oostelijk gedeelte van den Indischen Archipel. Extra bijvoegsel (appendix) Javasche Courant 1900, 66, p. 3-48.
('Preliminary account of a geological trip through the eastern part of the Indies Archipelago'. Early summary of the monumental Verbeek (1908) Moluccas Report)

Verbeek, R.D.M. (1908)- Molukkenverslag. Geologische verkenningstochten in het oostelijke gedeelte van den Nederlandsch Oostindische Archipel. Jaarboek Mijnwezen Nederlandsch Oost-Indie 37 (1908), Wetenschappelijk Gedeelte, p. 1-826 + Atlas
('Moluccas Report- geological reconnaissance trips in the eastern part of the Netherlands East Indies archipelago'. Classic early geological reconnaissance survey of 250 islands in E Indonesia in 9 months in 1899, and last of Verbeek's voluminous reports on geology of parts of Indonesia. Includes brief reports by specialist paleontologists. 'Old schist formation' metamorphics rel. widespread. Permian present on Timor and adjacent islands, possibly also on Ambon and Babar. Locally bituminous Triassic brachiopod limestones on Ambon. Widespread marine Mesozoic sediments. Triassic- Jurassic rocks and faunas similarities with Himalayas and Alps, etc. Samples from Kai Besar with illustrations of Eocene Discocyclina- Asterocyclina + Lacazina)

Verbeek, R.D.M. (1908)- Rapport sur les Moluques. Reconnaissances geologiques dan la partie orientale de l'archipel des Indes orientales neerlandaises. Government Printing Office, Batavia, 844p. + Atlas.
(Atlas online at: https://gallica.bnf.fr/ark:/12148/bpt6k64702884.texteImage)
(French edition of the Dutch-language 'Molukkenverlag' by Verbeek (1908))

Verbeek, R.D.M. (1910)- Geologie van den Nederlandsch Oost-Indischen Archipel. In: Geillustreerd handboek van Insulinde, Uitgeversmaatschappij Vivat, Amsterdam, p.

Vergnolle, M., E. Calais & L. Dong (2007)- Dynamics of continental deformation in Asia. J. of Geophysical Research 112, B11403, p. 1-22.
(online at: http://onlinelibrary.wiley.com/doi/10.1029/2006JB004807/pdf)
(Another model of Asia tectonic plates relative to present-day horizontal motions measured by GPS)

Verstappen, H.T. (1960)- On the geomorphology of raised coral reefs and its tectonic significance. Zeitschrift fur Geomorphologie 4, p. 1-28.
(Large-scale, young regional uplifts characterized by island surrounded by uplifted reef terraces, with many examples from E Indonesian Archipelago. 'Reefcaps' generally thin and quickly disappear by dissolution (e.g. common notches in raised reefs at sea level). Six types of reefcaps distinguished. Generally, highest reef terraces are oldest. Discussions of reef caps of Muna and Kai Kecil islands)

Verstappen, H.Th. (2010)- Indonesian landforms and plate tectonics. Jurnal Geologi Indonesia 5, 3, p. 197-207.
(online at: www.bgl.esdm.go.id/publication/index.php/dir/article_detail/275)
(Landforms in Indonesia resulted primarily from plate tectonics. Greatest relief amplitudes near plate boundaries: deep ocean trenches at subduction zones and mountain ranges at collision belts. Living and raised coral reefs, volcanoes, and fault scarps are important geomorphic indicators of active plate tectonics)

Villeneuve, M., J.J. Cornee, J.P. Rehault, C. Honthaas, W. Gunawan and Geobanda Group (2000)- Tectonostratigraphy of the East Indonesian blocks. AAPG International Conference Bali 2000, American Assoc. Petroleum Geol. (AAPG) Bull. 84, 9, p. 1511. (*Abstract*).
(online at: https://www.searchanddiscovery.com/abstracts/html/2000/intl/abstracts/458.htm)
(Apart from the Asiatic, Australian and Pacific margin, four microblocks have been distinguished in East Indonesia area: Banda, Lucipara, Banggai-Sula and Irian Jaya. All very different stratigraphic and tectonic evolution.N Gondwana origin suggsted for Banggai-Sula, Lucipara and Irian Jaya blocks)

Villeneuve, M., R. Martini, H. Bellon, J.P. Rehault, J.J. Cornee, O. Bellier, S. Burhanuddin, F. Hinschberger, C. Honthaas & C. Monnier (2010)- Deciphering of six blocks of Gondwanan origin within Eastern Indonesia (South East Asia). Gondwana Research 18, 2-3, p. 420-437.
(online at: www.academia.edu/74035027/Deciphering_of_six_blocks_of_Gondwanan_origin_within_Eastern_Indonesia_South_East_Asia)
(E Indonesia 3 main plates (Eurasian, Indo-Australian, Philippine-Pacific), 7 blocks (six from NE Gondwanan margin, Halmahera from Pacific plate). Timor and Kolonodale (or Argo) blocks came from NW Australian

margin. Lucipara, Seram and Banggai-Sula blocks originated from W extension of PNG while Irian Jaya block is still linked to N Australian margin. Timor and Kolonodale blocks detached from Gondwana in Jurassic; Lucipara, Seram and Banggai-Sula detached from PNG in Neogene. All Gondwanan blocks collided with Eurasian active margin near Sulawesi. Timor and Kolonodale joined Eurasian margin by end Paleogene. Lucipara, Seram and Banggai-Sula collided with Sulawesi between M Miocene- M Pliocene and, with Kolonodale, suffered opening of N and S Banda back-arc basins by Late Miocene. Timor block moved S with S margin of S Banda basin and collided with N Australian margin in M Pliocene)

Villeneuve, M., J.P. Rehault, J.J. Cornee, C. Honthaas & W. Gunawan (1998)- Evolution geodynamique de l'Indonesie orientale, de l'Eocene au Pliocene. Comptes Rendus Academie Sciences, Paris, Ser. IIA, Earth Planetary Science, 327, 5, p. 291-302.
(online at: www.academia.edu/9355841/volution_g%C3%A9odynamique_de_lIndon%C3%A9sie_orien Etc.)
('Geodynamic evolution of Eastern Indonesia from the Eocene to the Pliocene' Geodynamic reconstruction based on evolution of 4 continental blocks, trapped by convergence of Asian, Australian and Pacific plates: (1) Banda (= dismembered E Sulawesi, Buru, Seram, Sinta Ridge), (2) Banggai- Sula, (3) Lucipara (S Banda Ridges, Tukang-Besi Ridge + Kur, Tanimbar; Oligocene-E Miocene arc, with E Miocene metamorphism event) and (4) Halmahera. Main events: (1) Late Eocene-Oligocene collision Banda block- Sulawesi; (2) E Miocene collision Lucipara Block (incl. Tukang Besi) - Banda Block in Buton; (3) Late Miocene extension with opening of N. Banda, S. Banda, Savu basins; (4) E Pliocene collision Banggai Sula- E Sulawesi; (5) Late Pliocene collisions of Australia and Banda and Irian Jaya blocks. Timor with its Late Miocene calc-alkaline intrusions in N was part of Banda Arc before M Pliocene collision with Australia)

Villeneuve, M., J.P. Rehault, J.J. Cornee, C. Honthaas, W. Gunawan and Geobanda-Group (1998)- The main steps of the geodynamic evolution of Eastern Indonesia since Upper Eocene. In: P. Wilson & G.W. Michel (eds.) The geodynamics of S and SE Asia (GEODYSSEA) Project. Scientific Technical Report STR/14, Geoforschungszentrum, Potsdam, Germany, p 264-275.
(online at: https://www.researchgate.net/publication/338825274_The_Main_Steps_of_the_Geodynamic_Evolution_of_Eastern_Indonesia_since_Upper_Eocene)
(Key geodynamic reconstruction from 6-year French-Indonesian project, showing geological evolution of five small continental blocks trapped by convergence of three main plates. Main steps (1) Late Eocene- Oligocene: Banda block (E and SE Sulawesi + Buton + Buru-Seram) joined SE Asia margin in Sulawesi (overthrusted by E Sulawesi ophiolite nappe);(2) E Miocene: Lucipara block (including Tukang Besi platform) collided with Banda block mainly in Buton area, (3) Late Miocene: broad NW-SE extensional regime, opening N Banda, S Banda, Savu, etc. basins;.(4) Late Pliocene: main collisions between Australian continental margin and Banda Arc at Timor and Irian Jaya blocks. Bangai-Sula collided with E Sulawesi at end of E Pliocene; (5) Pleistocene: Australian block pushed N-ward the S part of Banda arc and new collision at N Irian Jaya with obduction of Solomon ophiolite onto Irian Jaya. Timor Block separate block, not part of Australian margin)

Visser, S.W. (1930)- On the distribution of earthquakes in the Netherlands East Indian Archipelago II, 1902-1926. Verhandelingen Koninklijk Magnetisch en Meteorologisch Observatorium, Batavia, 22, Albrecht, Weltevreden, p. 1-120.

Visser, S.W. (1937)- Aardbevingen met zeer diepen haard. Tijdschrift Koninklijk Nederlands Aardrijkskundig Genootschap (2) 54, 3, p. 313-335.
(online at: https://www.delpher.nl/nl/tijdschriften/...)
('Earthquakes with very deep source'. Mainly a general review of deep earthquakes, with comments on earthquake belts in the Netherlands Indies)

Visser, S.W. (1937)- Aardbevingen met zeer diepen haard in Nederlandsch Indie. Natuurkundig Tijdschrift voor Nederlandsch-Indie 97, 3, p. 168-172.
(online at: http://62.41.28.253/cgi-bin/...)
('Earthquakes with very deep source in Netherlands Indies'. Describes Berlage (1937) observation that deep-focus earthquakes occur along inclined surface, dipping 30°-50° from borders of ocean under continent in Indonesia)

Visser, S.W. (1937)- A connection between deep-focus earthquakes and anomalies of terrestrial magmatism and gravity. Terrestrial Magnetism and Atmospheric Electricity 42, 4, p. 361-362.
(online at: www.agu.org/journals/te/v042/i004/TE042i004p00361/TE042i004p00361.pdf)
(Deep-focus earthquakes occur in well-defined areas. Loci deeper than 600 km in Japan, Philippines, Moluccas, Java Sea, etc., all along inclined surface, sloping 30-40° from borders of ocean down below continents. Associated with axis of negative gravity anomalies of Vening Meinesz. May be related to current systems in inner earth (N.B.: Visser and Berlage discovered here what later would be called Wadati-Benioff zone; JTvG))

Visser, S.W. (1938)- Seismic isobaths in the East Indian Archipelago. Gerlands Beitrage Geophysik 53, p. 389-391.
(On earthquake belts and possible connection with Vening Meinesz's gravity anomalies)

Vogelsang, H. (1867)- Philosophie der Geologie und mikroskopische Gesteinsstudien. Verlag Max Cohen, Bonn, p. 1-273.
(online at: https://www.digitale-sammlungen.de/en/details/bsb10284797)
('Philosophy of geology and microscopic rock studies'. Early textbook on geology, its historic development and prominent geologists, and microscopic studies. By German Dr. Hermann Vogelsang (1838-1874), Professor of Mineralogy and Geology at the Polytechnical School of Delft in 1864-1874, who trained several of the first geologically-oriented mining engineers in the Netherlands Indies (Verbeek, Fennema, Hooze, etc.). Includes 'pioneering' microscopical rock thin section descriptions of several volcanic and igneous rocks from Java)

Volz, W. (1912)- Der Malaiische Archipel, sein Bau und sein Zusammenhang mit Asien. Sitzungsberichte Physikalisch-Medizinischen Sozietat Erlangen 44, p. 178-204.
(online at: https://www.zobodat.at/pdf/Sitzber-physik-med-Soc-Erlangen_44_0178-0204.pdf)
('The Malay Archipelago: its framework and relation with Asia'. Early, obsolete tectonic model of Indonesia)

Voris, H.K. (2000)- Maps of Pleistocene sea levels in Southeast Asia: shorelines, river systems and time durations. J. of Biogeography 27, 5, p. 1153-1167.
(Often used but rather simplistic series of maps from Australia to Sri Lanka to Taiwan showing areas of exposed land in Indo-Australian region during periods of Pleistocene lowered sea levels)

Vroon, P.Z., M.J. Van Bergen & E.J. Forde (1996)- Pb and Nd isotope constraints on the provenance of tectonically dispersed continental fragments in East Indonesia. In: R. Hall & D. Blundell (eds.) Tectonic Evolution of Southeast Asia, Geological Society, London, Special Publ. 106, p. 445-453.
(online at: https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=7a8d19b05a365e5724c1ed24886dd4e78798fc3f)
(Pb-Nd isotope signatures of igneous and (meta) sedimentary rocks from E Indonesia continental fragments help identify provenance areas: Ambon-Seram= southern New Guinea, Bacan= North Australia, Banda Ridges = 'Pacific' New Guinea, and Sumba= Sundaland)

VSI (Volcanological Survey Indonesia) (2005)- Geothermal resources in Indonesia. Volcanological Survey Indonesia (VSI) Geothermal Division, p.
(online at: www.vsi.esdm.go.id/pbumi/index.html)

Wakita, K. (1996)- Cretaceous subduction, accretion and collison along the southeastern margin of Sundaland. In: S.Y. Kim et al. (eds.) Proc. 32nd Annual Session Coord. Comm. Coastal Offshore Geoscience Programmes E and SE Asia (CCOP), Tsukuba 1995, p. 201-218.
(Early version of Wakita series of papers on Cretaceous accretionary complexes at SE Sundaland margin, particularly Luk-Ulo melange complex in C Java and Bantimala Complex of S Sulawesi)

Wakita, K. (1997)- Oceanic plate stratigraphy and tectonics in East and Southeast Asia. In: P. Dheeradilok et al. (eds.) Proc. Int. Conf. Stratigraphy and tectonic evolution in Southeast Asia and the South Pacific (GEOTHAI'97), Bangkok, Dept. Mineral Resources, 1, p. 388-401.
(Components of ancient accretionary complexes include pillow basalt, limestone, radiolarian chert and shale, ultramafic rocks, glaucophane schist, etc. Radiolarian biostratigraphy useful for reconstruction of accretionary complexes, as shown in example of Luk-Ulo Melange of C Java. Lithologic successions in different tectonic units similar and reflect 'Oceanic Plate Stratigraphy' sequence:(1) birth of oceanic plate at oceanic ridge, (2) formation of volcanic islands near ridge covered by reefs (= Orbitolina Limestone?; HvG), (3) calcilutite sedimentation at flank of volcanic islands, (4) pelagic deposition of radiolarians on oceanic plate, (5) mixing with detrital clays to form hemipelagic siliceous shale, and (6) sandstone- shale near trench of convergent margin. Radiolarian biostratigraphy of Luk Ulo show Valanginian- Campanian oceanic chert deposition)

Wakita, K. (1999)- Mesozoic melange formation in Indonesia; with special reference to Jurassic melanges of Japan. In: G.H. Teh (ed.) Proc. 9th Regional Congress Geology Mineral Energy Resources of SE Asia (GEOSEA '98), Kuala Lumpur 1998, Bull. Geological Society Malaysia 43, p. 19-30.
(online at: www.gsm.org.my/products/702001-100838-PDF.pdf)
(Cretaceous melanges in (1) C Java (Luk Ulo; mainly HP metamorphics, bedded cherts siliceous shale, ultramafics, etc.; overlain by Eocene), (2) S Sulawesi (Bantimala; also mainly HP metamorphics, ultramafics, bedded cherts etc.) and (3) S Kalimantan (Meratus; mainly bedded chert, ultramafics, schist; unconformably overlain by Eocene). Clasts of metamorphic and ultrabasic rocks derived from blocks exhumed following microcontinent collision; incorporated within melanges during microcontinental collision)

Wakita, K. (2000)- Cretaceous accretionary: collision complexes in central Indonesia. J. Asian Earth Sciences 18, 6, p. 739-749. *(online at: http://directory.umm.ac.id/Data%20Elmu/jurnal/J-a/Journal%20of%20Asian%20Earth%20Science/Vol18.Issue6.Dec2000/404.pdf)*
(Cretaceous accretionary complexes in W Java (Ciletuh), C Java (Karangsambung, Jiwo), S and C Sulawesi and SE Kalimantan (Meratus, Pulau Laut) reflect Cretaceous convergent SE margin of Sundaland craton, which was surrounded by marginal sea, with immature volcanic arc at periphery. Oceanic plate subducted beneath arc from S, carrying microcontinents detached from Gondwanaland. Accretionary wedge with fragments of oceanic crust. Jurassic shallow marine allochthonous formation was emplaced by collision of continental blocks in Bantimala, S Sulawesi. Collision exhumed very high pressure metamorphic rocks from deeper parts of accretionary wedge)

Wakita, K. & I. Metcalfe (2005)- Ocean plate stratigraphy in East and Southeast Asia. J. Asian Earth Sciences 24, p. 679-702.
(online at: https://www.academia.edu/10273902/Ocean_Plate_Stratigraphy_in_East_and_Southeast_Asia)
(Ancient accretionary wedges recognized by glaucophane schist, radiolarian chert and melange. Typical 'Ocean Plate Stratigraphy' (OPS) from old to young: pillow basalts (birth of oceanic plate at mid-ocean ridge), limestone (ridge covered by reefs), radiolarian chert (pelagic sediment), siliceous shale (mixed radiolarians and detrital grains in hemipelagic setting) and shale- sandstone (sedimentation at or near trench of convergent margin). Radiolarian biostratigraphy provides information on time and duration of ocean plate subduction)

Wakita, K., I. Metcalfe, S. Hada & M.J.N. Daigo (2000)- Digital terrane map of East and Southeast Asia. Geosciences Journal 4, p. 19-22.

Wakita, K., K. Miyazaki, J. Sopaheluwakan, I. Zulkarnain, C. Parkinson & Munasri (1997)- Cretaceous subduction complexes along the southeastern margin of Sundaland. Memoir Geological Society Japan 48, p. 152-162.
(online at: https://dl.ndl.go.jp/view/prepareDownload?itemId=info%3Andljp%2Fpid%2F10810232)
Sundaland surrounded by accretionary complexes and accreted microcontinents rifted from Gondwanaland. Cretaceous accretionary complexes in C Java, S Sulawesi and S Kalimantan similar components, but different histories. Luk-Ulo, C Java, subduction complex formed by continuous subduction of oceanic plate throughout Cretaceous. Meratus (S Kalimantan), also product of oceanic plate subduction in island arc setting. Bantimala, S Sulawesi, ocean plate subduction followed by collision of continental fragment)

Wakita, K., M. Pubellier & B.F. Windley (2013)- Tectonic processes, from rifting to collision via subduction, in SE Asia and the western Pacific: a key to understanding the architecture of the Central Asian orogenic belt Lithosphere 5, 3, p. 265-276.
(online at: www.academia.edu/38111468/Tectonic_processes_from_rifting_to_collision_via_subduction Etc.)
(On processes of accretion of continental blocks in Tertiary in SE Asia and W Pacific. Subduction associated with back-arc extension, particularly in Indonesia and SW Pacific region. Arc-arc collisional complexes present in Taiwan, Philippines and Japan. Geological record of SE Asia and W Pacific provides modern analogue for geological and tectonic history of Central Asian Orogenic Belt)

Waluyo (1992)- Seismotectonics of eastern Indonesian region. Ph.D. Thesis St. Louis University, p. 1-343. *(Unpublished)*
(Earthquake data (ISC 1970-1986) used for interpretation of East Indonesia tectonics)

Wang, L. & X. He (2020)- Seismic anisotropy in the Java-Banda and Philippine subduction zones and its implications for the mantle flow system beneath the Sunda Plate. Geochem. Geophysics Geosystems 21, 4, e2019GC008658, p. 1-19.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2019GC008658)
(Sunda Plate is minor tectonic plate, bounded by active convergent boundaries, with subducting Philippine Sea Plate to E and Indo-Australian Plate to S and W. Mantle flow system beneath Sunda Plate composed of various types of flow developed in mantle wedges. Interactions play important role in regional geodynamics in upper mantle above 670-km discontinuity)

Wanner, J. (1907)- Triaspetrefakten der Molukken und des Timorarchipels. Neues Jahrbuch Mineralogie Geologie Palaontologie, Beilage Band 24, p. 159-220.
(online at: http://mmtk.ginras.ru/pdf/Wanner_1907_Tr_Timor_HI.pdf)
('Triassic fossils from the Moluccas and Timor Archipelago'. Late Triassic molluscs, corals, ammonites faunas from Misool (Carnian dark shales with Daonella), Seram (typical Tethys-Mediteranean Norian molluscs Monotis salinaria, Amonotis and brachiopod Halorella). From Seram limestone come corals Thecosmilia n.sp. aff. clathrata and Montlivaltia molukkana n.sp. and Pachypora intabulata n.sp. (= Lovcenipora vinassai; JTvG). Also Triassic fossils from Timor-Roti- Savu (generally deeper water facies, but potentially similar 'alpine' character with mainly Halobia, Daonella, but also 'Pacific' mollusc Pseudomonotis ochotica). Timor/Roti/ Savu Triassic reminiscent of North Sumatra Upper Triassic described by Volz, 1899. First author to recognize Alpine/ Tethyan affinities of Late Triassic bivalves and ammonites of Seram and Timor)

Wanner, J. (1910)- Einige geologische Ergebnisse einer im Jahre 1909 ausgefuhrten Reise durch den Ostlichen Teil des indoaustralischen Archipels: Vorlaufige Mitteilung. Centralblatt Mineralogie Geologie Palaontologie 1910, 5, p. 137-147.
(online at: https://www.zobodat.at/pdf/Centralblatt-Mineral-Geol-Palaeont_1910_0137-0147.pdf)
('Some geological results of a 1909 trip through the eastern part of the Indo-Australian Archipelago; preliminary communication'. Summary of journey to Misool (fossil-rich Mesozoic), C Halmahera (ultramafic rocks, ?Mesozoic red-brown radiolarite, Tertiary clastics), Obi (found M Jurassic Stephanoceras and other ammonites at W coast along Akelamo River, and Miocene fossil-rich clastics) and Timor (Permian rich in fossils, marine Triassic and Jurassic (no Cretaceous seen), widespread Eocene Alveolina and Nummulites limestones, now uplifted to 1400m, etc. No figures)

Wanner, J. (1910)- Neues uber die Perm-, Trias- und Juraformation des Indo-Australischen Archipels. Centralblatt Mineralogie Geologie Palaontologie 1910, p. 736-741.
(online at: www.biodiversitylibrary.org/item/192869#page/766/mode/1up)
('News on the Permian, Triassic and Jurassic formations of the Indo- Australian Archipelago'. Short note on Timor Permian ammonites (incl. common Agathiceras), and U Triassic fauna of platy limestone of Bukit Kandung/ Lurah Tambang in W Sumatra, previously decribed by Boettger and interpreted as Eocene, with Myophoria, Cardita. Fauna very similar to Nucula Marl of Misool and probably of U Norian age. No figures)

Wanner, J. (1921)- Zur Tektonik der Molukken. Geologische Rundschau 12, 3-5, p. 155-165.
(online at: https://www.digizeitschriften.de/dms/img/?PID=GDZPPN000456594)
('On the tectonics of the Moluccas'. Early paper, with focus on geology of Buru and Seram Islands)

Wanner, J. (1925)- Die Malayische Geosynklinale im Mesozoikum. Verhandelingen Geologisch-Mijnbouwkundig Genootschap Nederland Kolonien, Geologische Serie 8 (Gedenkboek Verbeek, memorial volume), p. 569-599.
(online at: https://books.google.com/books?id=Yy0RAAAAIAAJ&pg)
('The Malayan geosyncline in the Mesozoic'. Rel. lengthy review of Triassic- Cretaceous deposits and macrofaunas across Indonesia. Unfortunately no figures)

Wanner, J. (1931)- Echinodermata In: B.G. Escher et al. (eds.) De palaeontologie en stratigraphie van Nederlandsch Oost-Indie, Leidsche Geologische Mededelingen 5 (K. Martin memorial volume), p. 436-460.
(online at: www.repository.naturalis.nl/document/549766)
(Listings of Paleozoic- Neogene echinodermata described from Indonesia. Permian of Timor richest in world with 320 species (50 blastoids, 270 crinoids). Number of Mesozoic species ~10% of Permian, mainly in Triassic. In Jurassic only two species, Pentacrinus rotiensis from Roti and Holectypus from Buru, Cretaceous similarly poor). Tertiary 85 species)

Wanner, J. (1931)- Mesozoikum. In: B.G. Escher et al. (eds.) De palaeontologie en stratigraphie van Nederlandsch Oost-Indie, Leidsche Geologische Mededelingen 5 (K. Martin memorial volume), p. 567-609.
(online at: www.repository.naturalis.nl/document/549402)
(Comprehensive review of distribution of Mesozoic rocks and fossils in E Indonesia, Sumatra, Borneo, etc. With correlation tables for Triassic, Jurassic and Cretaceous)

Wanner, J. (1940)- Gesteinsbildende Foraminiferen aus dem Malm und Unterkreide des ostlichen Ostindischen Archipels, nebst Bemerkungen uber *Orbulinaria* Rhumbler und andere verwandte Foraminiferen. Palaeontologische Zeitschrift 22, 2, p. 75-99.
('Rock-building foraminifera from the Malm and Lower Cretaceous in the eastern East Indies Archipelago'. First description of Late Jurassic calcispheres (Stomiosphaera moluccana, Cadosina fusca) from Timor, Misool, Seram, Roti, Buton and E Sulawesi. Indicator species for Tethyan latest Jurassic (+earliest Cretaceous?) (NB: these are not foraminifera, but more closely related to calcareous nannofossils/ pelagic algae; JTvG))

Ward, J.F. (2024)- Late Cenozoic alkaline magmatism in East Asia and Indonesia: Tectonic controls on melt generation and implications for mineral prospectivity. Ph.D. Thesis, University of Queensland, p. 1-135.
(online at: https://espace.library.uq.edu.au/data/UQ_06f88eb/s4357107_phd_thesis.pdf)
(Mainly collection of papers. Study of E Asia/ Indonesia/ PNG volcanoes using tomography, geochemistry, etc. Relationships between geochemically anomalous volcanoes and Pliocene- Recent porphyry ore deposits seemingly tied to slab tears))

Ward, J.F., G. Rosenbaum, T. Ubide & M. Sandiford (2024)- Slab segmentation, anomalous arc volcanism, and giant porphyry copper deposits in Indonesia. Earth Planetary Science Letters 626, 118532, p. 1-11.
(online at: https://www.sciencedirect.com/science/article/pii/S0012821X23005447)
(Most Holocene volcanoes in Indonesia display geochemical and geophysical properties characteristic of formation via mantle wedge metasomatism. Some volcanoes (Toba, Ungaran, Muriah, Rinjani, Tambora, Sangeang Api, Batu Tara) with anomalous alkaline geochemistry, violent eruptions, and above sections of subducting slab considered too deep to induce mantle melting via slab dehydration. Anomalous volcanoes associated with giant Pliocene- Recent porphyry Cu deposits and linked to slab segmentation due to slab tearing. Slab tearing also locally enhanced magma flux, leading to extremely violent eruptions at Toba, Rinjani and Tambora)

Watkinson, I.M. & R. Hall (2017)- Fault systems of the eastern Indonesian triple junction: evaluation of Quaternary activity and implications for seismic hazards. In: P. Cummins & I. Meilano (eds.) Geohazards in

Indonesia: Earth science for disaster risk reduction, Geol. Soc, London, Special Publ. 441, p. 71-120. *(online at: https://earthjay.com/earthquakes/20180928_indonesia/watkinson_hall_2017_East_Indonesia_faults.pdf)*
(Study of 27 fault systems in Eastern Indonesia. Most fault systems highly segmented, many linked by narrow (<3 km) stepovers to form quasi-continuous segments capable of M>7.5 earthquakes. Sinistral shear across soft-linked Yapen and Tarera- Aiduna faults and continuation into transpressive Seram fold thrust belt perhaps most active belt of deformation. Palu-Koro Fault of Sulawesi long, straight and capable of super shear ruptures, considered to be greatest seismic risk in region)

Watkinson, I.M., R. Hall, M.A. Cottam, I. Sevastjanova, S. Suggate, I. Gunawan et al. (2012)- New insights into the geological evolution of Eastern Indonesia from recent research projects by the SE Asia Research Group. Berita Sedimentologi 23, p. 21-27.
(online at: https://journal.iagi.or.id/index.php/FOSI/article/view/189)
(Brief review of ongoing Indonesia research projects at University of London/ Royal Holloway group)

Wegener, A. (1922)- Die Entstehung der Kontinente und Ozeanen. 3rd ed., Vieweg, Braunschweig, p. 1-144.
(online at: https://babel.hathitrust.org/cgi/pt?id=uc1.$b34771;view=1up;seq=1)
('The origin of the continents and oceans'. Third edition of classic book on Continental Drift theory and breakup of the Pangea supercontinent after Late Carboniferous. Includes explanation for arcuate shape of Banda Arc by NW movement of Australia- New Guinea continent into Indonesian archipelago)

Wehner, D., N. Blom, N. Rawlinson, Daryono, C. Bohm, M.S. Miller, P. Supendi & S. Widiyantoro (2022)- SASSY21: A 3-D seismic structural model of the lithosphere and underlying mantle beneath Southeast Asia from multi-scale adjoint waveform tomography. J. of Geophysical Research: Solid Earth 127, 3, e2021JB022930, p. 1-25.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/pdf/10.1029/2021JB022930)
(First continental-scale seismic model of lithosphere and mantle beneath SE Asia obtained from adjoint waveform tomography. SASSY21 reveals detailed anomalies down to mantle transition zone, including multiple subduction zones. Most prominent feature is (Indo-)Australian plate descending beneath Indonesia, imaged as one continuous slab along the 180° curvature of Banda Arc. Tomography confirms existence of hole in slab 300km under Mt Tambora. High S-wave velocity zone 100-300km under N Borneo possibly associated with remnant subduction zone that terminated in M-L Miocene. S-shape anomaly 100-300km under E coast of Borneo may be tied to underthrusting from Sulawesi in Miocene)

Wensink, H. (1987)- Displaced terranes of Gondwana origin in Indonesia: paleomagnetic implications. Annales Soc. Geologique du Nord CVII, p. 81-87.
(Summary of paleomagnetic data from E Indonesia. Timor: Permian is displaced terrane of Australian origin; Early Cretaceous deep sea sediment formed ~1000km to S, shifted N with N drift of Australia). Original position of Misool rel. to Australia was farther N than today)

Westerveld, J. (1936)- The granites of the Malayan tin belt compared with tin-granites from other regions. Proc. Koninklijke Nederlandse Akademie van Wetenschappen, Amsterdam, 39, 10, p. 1199-1209.
(online at: https://dwc.knaw.nl/DL/publications/PU00016993.pdf)
(Great petrographic uniformity of tin-bearing and related granite rocks of Inner Malayan Arc (Malay PeninsuIa, Indonesia Tin Islands, etc.) Tin-granites end-stages of differentiation of acid magmas, with proportions of main constituents not essentially different from non- tin-bearing biotite-granites)

Westerveld, J. (1939)- Metaalprovincies in Nederlandsch Oost-Indie. Public address at the start of position of lecturer in economic geology at the University of Amsterdam. Amsterdam, p. 1-30.
(online at: https://www.delpher.nl/nl/boeken/view?identifier=MMKB21:034955000:00028)
('Metal provinces in the Netherlands East Indies'. Four main metallogenic provinces: (1) tin islands Bangka-Billition, etc. (2) Gold-silver mineralization on Sumatra, associated with ?Cretaceous intrusives, (3) W and S Sumatra gold-silver associated with post-Miocene intrusives and (4) nickel-iron in Banda Arc- E Sulawesi, associated with ultrabasic rocks. No figures)

Westerveld, J. (1949)- Fasen van gebergtevorming en ertsprovincies in Nederlands Oost-Indie. De Ingenieur 1949, 12-13, p. 1-25.
('Phases of mountain building and ore provinces in Netherlands East Indies'.Review of tectonics of Indonesia and associated mineral deposits. W of New Guinea four concentric orogens: (1) Late Jurassic 'Malaya orogen', connecting W Borneo with E Burma through Malaya, with tin, gold and bauxite; (2) Cretaceous 'Sumatra orogen' (Sumatra-Java- SE Borneo), with Au-Ag-bearing base metals in Sumatra, iron laterites and diamond-gold placers in Borneo (3) M Miocene 'Sunda orogen' from W Burma through inner Sunda islands to W arc of Sulawesi, with epithermal Au-Ag-and Mn-ores; (4) Late Cretaceous- M Miocene 'Moluccas orogen' with nickel and lateritic iron ores on peridotites. Good maps of ore deposits. See also English version (Westerveld,1952))

Westerveld, J. (1952)- Phases of mountain building and mineral provinces in the East Indies. Reports 18th Session International Geological Congress, Great Britain 1948, Section 1, 13, p. 245-255.
(Abbreviated, English version of Westerveld (1949))

Wheeler, P. & N. White (2000)- Quest for dynamic topography: observations from Southeast Asia. Geology (GSA) 28, 11, p. 963-966.
(Concludes that there is no measurable dynamic topography in SE Asia)

Wheeler, P. & N. White (2002)- Measuring dynamic topography: an analysis of Southeast Asia. Tectonics 21, 1040, p. 1-24.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2001TC900023)
(Models of dynamic topography generated by subducting slabs, predict ~1-2 km of subsidence on wavelengths of 100- 1000 km. Existence of such subsidence important for understanding basin formation, relative sea level changes, etc. Analysis of SE Asia constrains maximum amplitude of dynamic subsidence to ~300m with range of 0-500 m, less than predicted. Distribution of anomalous subsidence suggests this may not be caused by dynamic topography and subducting slabs)

White, J.Th. (1925)- Petrographische werkzaamheden ten behoeve van het Bodemkundig Onderzoek in Nederlandsch Oost-Indie. Mededelingen Algemeen Proefstation Landbouw, Buitenzorg (Bogor) 18, p. 1-12.
(online at: https://resolver.kb.nl/resolve?urn=MMKB24:078441000:pdf))
('Petrographic studies for soil science research in the Netherlands Indies'. Paper by Dr. Ir. John Thomas White, who replaced Dr. E.C.J. Mohr as'Hoofd voor het Laboratorium voor Bodemonderzoek (Head of the Soil Science Laboratory) in 1920, and stayed until 1930 or later)

Whittaker, J.M., R.D. Muller, M. Sdrolias & C. Heine (2007)- Sunda-Java trench kinematics, slab window formation and overriding plate deformation since the Cretaceous. Earth Planetary Science Letters 255, p. 445-457.
(Plate motions and reconstructions of subducted ocean floor used to analyse subduction kinematics and observed upper plate strain since 80 Ma along Sunda-Java trench. Upper plate advance and retreat is main influence on upper plate strain, but subduction of large bathymetric ridges also significant. Compression in Sundaland back-arc region linked to upper plate advance. Sundaland backarc extension correlates with (a) retreat of upper plate, and (b) advance of upper plate with more rapid advance of Sundaland margin due to hinge rollback. Subduction of large bathymetric ridges causes compression in upper plate, especially Wharton Ridge subduction under Sumatra between 15-0 Ma)

Wichmann, A. (1890)- Bericht uber eine im Jahre 1888-1889 im Auftrag der Niederlandischen Geographischen Gesellschaft ausgefuhrte Reise nach dem Indischen Archipel, Part 1: I. Java and II. Celebes. Tijdschrift Koninklijk Nederlands Aardrijkskundig Genootschap (2) 7, p. 907-994.
(online at: https://www.delpher.nl/nl/tijdschriften/view?identifier=MMUBA13:001604001:00003)
(Report on a 1888-1889 geographic reconnaissance trip to Indies Archipelago- part 1 (Java, Sulawesi) by German geologist and first geology professor at University of Utrecht, Arthur Wichmann, sponsored by KNAG (Royal Netherlands Geographical Society). Mainly travel and scenery descriptions)

Wichmann, A. (1925)- Geologische Ergebnisse der Siboga Expedition. Siboga Expeditie Monograph LXVI, Brill, Leiden, p. 1-164.
(Read online at: https://catalog.hathitrust.org/Record/001675376)
(Geological results of rocks collected during the 1899-1900 Siboga marine expedition around Banda arc islands (under leadership of Prof. Max Weber; samples deposited in Geological Institute, Utrecht). Descriptions of rocks from 31 E Indonesia islands, mainly volcanic, but also incl. folded, reddish, thin-bedded Triassic radiolarian limestone on Sawu, Jurassic ammonites from claystones on Obi Mayor, Tertiary limestones on Pisang Islands, Mesozoic limestones near Misool, Mesozoic bituminous limestone on Buru, serpentinite and gabbro on Manowoko, Kasiui (SE of Seram) with Seram-like Triassic limestones and radiolarite, schists-phyllites-amphibolites on small islands between Seram and Kai strikingly similar to Seram pre-Upper Triassic (Valk 1945, p. 38), Upper Eocene limestone from Kai Besar, etc.)

Widiyantoro, S., J.D. Pesicek & C.H. Thurber (2011)- Complex structure of the lithospheric slab beneath the Banda arc, eastern Indonesia depicted by a seismic tomographic model. Research in Geophysics 1, 1, p. 1-6.
(online at: https://www.pagepress.org/journals/rg/article/view/rg.2011.e1/pdf)
(New seismic tomographic images of E Indonesia confirm previous observations of spoon-shaped structure of subducted slab beneath curved Banda arc. A slab lying flat on 660 km discontinuity beneath Banda Sea also well imaged. Data support scenario of Banda arc subduction rollback. Slab detachment beneath Buru also confirmed by new model)

Widiyantoro, S., J.D. Pesicek & C.H. Thurber (2011)- Subducting slab structure below the eastern Sunda Arc inferred from non-linear seismic tomographic imaging. In: R. Hall et al. (eds.) The SE Asian gateway: history and tectonics of Australia-Asia collision, Geological Society, London, Special Publ. 355, p. 139-155.
(online at: https://earthjay.com/earthquakes/20180819_indonesia/widiyantoro_etal_2011_slab_structure_eastern_sunda_arc.pdf)
(New seismic tomographic images across Sunda Arc from Java to Timor. Confirm previous observations of hole in subducted slab in upper mantle beneath E Java, which may be related to arrival of buoyant plateau near E Java at ~8 Ma. Images also suggest tear in slab below E-most part of Sunda arc, where downgoing slab is deflected in mantle transition zone, possibly related to arc-continent collision around Timor at ~3 Ma)

Widiyantoro, S. & N.T. Puspito (1998)- Tomografi waktu tempuh gelombang S dan struktur 3-D zona penunjaman di bawah Busur Sunda. J. Matematika Sains 3, 2, p. 97-104.
(online at: http://journal.fmipa.itb.ac.id/jms/article/viewFile/48/43)
('S-wave travel time tomography and 3-D structure of the subduction zone beneath the Sunda Arc'. Tomographic imaging using S-wave traveltime show 3-D mantle structure below Sunda arc subduction zone. Lithospheric slab penetrates into lower mantle beneath Sunda arc. Under Sumatra deep slab may be detached from seismogenic slab, under Java slab in upper mantle is necking)

Widiyantoro, S. & R. van der Hilst (1996)- Structure and evolution of subducted lithosphere beneath the Sunda arc, Indonesia. Science 271, p. 1566-1570.
(online at: https://hilst.mit.edu/wp-content/uploads/2017/05/1996_science_271-1566-1570.pdf)
(Tomographic imaging reveals seismic anomalies below Sunda island arc, suggesting lithospheric slab down to at least 1500 km. Sunda slab forms E end of deep anomaly associated with past subduction of Mesozoic Tethys Ocean. Lithospheric slab continuous feature from surface to lower mantle below Java, with local deflection where slab continues into lower mantle. Deep slab seems detached from upper mantle slab beneath Sumatra)

Widiyantoro, S. & R. van der Hilst (1997)- Mantle structure beneath Indonesia inferred from high-resolution tomographic imaging. Geophysical J. International 130, p. 167-182.
(online at: https://hilst.mit.edu/wp-content/uploads/2017/05/1997_gji_130-167-182.pdf)
(Tomographic inversions give images of subducted slabs. Beniof zone steep (60°N) below Java, gently dipping at 60° W below E Banda Arc. Sunda Arc slab below 300 km looks detached in Sumatra, possibly also in Java)

Wiyanto, B., Sulistiyono, T. Junaedi & S. Hadipanjoyo (2009)- The re-analysis of the mature western area of Indonesian Tertiary basins for finding additional oil and gas resources. Lemigas Scientific Contributions 32, 1, p. 45-55.
(online at: https://journal.lemigas.esdm.go.id/index.php/SCOG/article/view/833)

Wikarno, R., T. Hardjono & D.S. Graha (1993)- Distribution of radiometric ages in Indonesia. 1:5,000,000. map. Geological Research Development Centre (GRDC), Bandung.

Wilson, P., B.A.C. Ambrosius, R. Noomen, D. Angermann, P. Wilson, M. Becker, E. Reinhart, A. Walpersdorf & C. Vigny (1999)- Observing plate motions in S.E. Asia: Geodetic results of the GEODYSSEA project. Geophysical Research Letters 26, 14, p. 2081-2084.
(online at: http://onlinelibrary.wiley.com/doi/10.1029/1999GL900395/pdf)
(Brief review of geodetic results and precision of 1994-1998 GPS project with 42 observation stations across SE Asia. Sundaland block does move E relative to stable Eurasian plate. Island of Biak moved >1 m horizontally due to two heavy earthquakes in 1996. Etc.)

Wilson, P. & G.W. Michel (1998)- The geodynamics of S and SE Asia (GEODYSSEA) Project. GeoForschungs Zentrum Potsdam, Scientific Technical Report 98/14, p. 1-359.
(Individual papers referenced separately here)

Wilson, P., J. Rais, C. Reigber & The GEODYSSEA project (1998)- An investigation of the geology and geodynamics of South and Southeast Asia. In: P. Wilson & G.W. Michel (eds.) The geodynamics of S and SE Asia (GEODYSSEA) Project, GeoForschungsZentrum, Potsdam, Scientific Technical Report STR 98/14, p. 9-27.
(Introduction to GEODYSSEA volume on results of 3.5-year international GPS motions acquisition project in 1994-1998))

Wilson, P., J. Rais, C. Reigber, E. Reinhart, B.A.C. Ambrosius, X. Le Pichon et al. (1998)- Study provides data on active plate tectonics in Southeast Asia Region. AGU EOS Transactions 79, 45, p. 545-549.
(online at: http://onlinelibrary.wiley.com/doi/10.1029/98EO00398/epdf)
(On GEODYSSEA Geodynamics of SE Asia GPS project)

Wing Easton, N. (1921)- Het ontstaan van den Maleischen archipel in het licht van Wegener's hypothesen. Tijdschrift Koninklijk Nederlands Aardrijkskundig Genootschap 38, p. 484-512.
(online at: https://www.delpher.nl/nl/tijdschriften/view?identifier=MMUBA13:001667001:00520)
(The origin of the Malay Archipelago (= Indonesia) in the light of Wegener's hypotheses'. Early paper in support of Wegener's continental drift theory. Major differences in geology between W and E parts of the 'Malay Archipelago' (Indonesia) lend support to Wegener's mechanism of a series of drifing continental plates, with E Indonesian islands derived from Australia. No maps)

Wing Easton, N. (1921)- On some extensions of Wegener's hypothesis and their bearing upon the meaning of the terms geosynclines and isostasy. Verhandelingen Geologisch-Mijnbouwkundig Genootschap Nederland Kolonien, Geologische Serie 5, p. 113-133.
(General discussion of Wegener's continental drift theory, with few references to W Borneo geology. Mainly of historic interest, reflecting widespread early support for the Wegener continental drift theory in Netherlands Indies)

Wirakusumah, A.D. (2008)- Tectonics and geothermal potential of Indonesia. In: J.A. Katili et al. (eds.) Tectonics and resources of Central and SE Asia (Halbouty volume), Pusat Survei Geol., Bandung, Special Publ. 34, p. 139-150.
(251 geothermal fields identified in Indonesia. 80% can be tied to volcanic processes, in four volcanic arcs)

Wiryosujono, S. & S. Tjokrosapoetro (1978)- Ophiolites in Eastern Indonesia. In: P. Nutalya (ed.) Proc. 3rd Regional Conference Geology and Mineral Resources of SE Asia (GEOSEA III), Bangkok, p. 641-651.

(Most or all mafic-ultramafic assemblages in E Indonesia may be regarded as ophiolites, but complete suites only on Timor and E Sulawesi. W Timor ophiolites limited to Mutis Zone, where low-angle overthrusts of allochthonous units commonly have sheared/ serpentinized ultramafics at base. Overlying ultramafic base are metamorphics and Permian- Triassic limestones associated with volcanics that probably developed on ancient seamounts. Two parallel ophiolite belts in W Papua, where N-dipping subduction zone at N margin of Australian Plate during Late Cretaceous- Eocene changed to S-dipping subduction in M-L Miocene and later)

Witoelar Kartaadiputra, L., Z. Ahmad & A. Reymond (1982)- Deep-sea basins in Indonesia. Proc. 11th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, 1, p. 53-81.

Wood, B.G.M. (1985)- The mechanics of progressive deformation in crustal plates- a working model for Southeast Asia. Bull. Geological Society Malaysia 18, p. 55-99.
(online at: www.gsm.org.my/products/702001-101144-PDF.pdf)
(Model for Tertiary deformation of SE Asian plates, linking Wrench Tectonics and Plate Tectonics. Irian shear system, Sabah shear system, Trans-Borneo shear system, etc. Back-arc basins form along margins of major continental plates where there is large component of strike-slip movement due to oblique plate convergence)

Xie, F., Z. Wang, D. Zhao, R. Gao & X. Chen (2024)- Tilting-axis anisotropic tomography and subduction dynamics of the Java-Banda Arc. Geophysical Research Letters 51, 5, e2023GL107720, p. 1-11.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/pdf/10.1029/2023GL107720)
(High-resolution 3-D anisotropic tomographic model beneath Java-Banda region shows significant differences between Java and Banda in pattern of anisotropy in both subductingAustralian slab and surrounding mantle, reflecting two different deformation modes in the two domains. Results support the single-slab subduction model (with 180° curvature) for Banda region.Trench-normal and upright fast-velocity-planes appear in deep upper mantle, which may indicate migrations in mantle wedge. Fast-velocity-planes in shallow mantle exhibit toroidal distribution, reflecting past counter-clockwise rotation of Kalimantan and asthenospheric material extrusion)

Yan, P., N. Zhang, H. Yuan, L. Qi & X. Liu (2023)- Possible south-dipping Mesozoic subduction at Southern Tethys Ocean- constrained from global tectonic reconstructions and seismic tomography. J. of Earth Science (China) 34, 1, p. 260-279. *(proof online at: https://www.researchgate.net/publication/350855995_Possible_South-dipping_Mesozoic_Subduction_at Etc.)*
(S margin of Tethys several episodes of ocean opening (Paleo-Tethys, Neo-Tethys) as terranes rifted away from E Gondwana. These oceans were terminated by N-dipping subduction during accretion to S Eurasia. However, S-dipping subduction situations proposed by many studies, but rarely shown in Tethyan reconstructions. possible Jurassic-Cretaceous S-dipping subduction: (1) along N edges of SW Borneo Block and (2) Incertus-Woyla Arc, supported by fast velocity anomalies under southern Indian Ocean)

Yang, T., M. Gurnis & S. Zahirovic (2016)- Mantle-induced subsidence and compression in SE Asia since the Early Miocene. Geophysical Research Letters 43, 5, p. 1901-1909.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1002/2016GL068050)
(Rift basins developed extensively across Sundaland since Eocene. Starting in E Miocene, basins in S Sundaland experienced poorly understood, widespread synchronous compression (inversion) and marine inundation, despite large drop in global sea level. Models suggest slab stagnates in transition zone beneath SE Asia before Miocene, but penetrated through 660 km mantle discontinuity during E Miocene and formed slab avalanche event, causing large-scale marine inundation, compression and basin inversion across S Sundaland (poor fit between subsidence prediction model and observed subsidence?; also, most or all Sundaland basins timing of early inversion and inundation not synchronous?; JTvG))

Yokoyama, T. & S. Nishimura (1981)- Results of age determination of Neogene rocks in Indonesia. Proc. 4th Regional Conference Geology and Mineral Energy Resources Southeast Asia (GEOSEA IV), Manila 1981, Geological Society Philippines, p. 239-244.

Yong, C.Z., P.H. Denys & C.F. Pearson (2017)- Present-day kinematics of the Sundaland plate. J. Applied Geodesy 11, 3, p. 169-177.
(Mainly on transient effect of coseismic and postseismic deformation on long-ternm GPS motions)

Zhang; X., S.L. Chung, J.T. Tang, A. Maulana, M. Mawaleda, T. Oo, C.Y. Tien & H.Y. Lee (2020)- Tracing Argoland in eastern Tethys and implications for India-Asia convergence. Geological Society of America (GSA) Bull. 133, 7-8, p. 1712-1722.
(online at: http://repository.unhas.ac.id/id/eprint/4940/1/Maulana_Argoland.pdf)
(Argoland continental fragment rifted from NW Australia in Late Jurassic, marking opening of Indian Ocean. East Java-West Sulawesi block currently (erroneously) assumed most likely candidate for missing Argoland. Detrital zircon data from W Sulawesi derived from Triassic basement of C Sulawesi metamorphic belt and SE Borneo (data from Witts, 2011) comparable to Birds Head (New Guinea)?. Age patterns of W Burma and E/W Java (data from Smyth 2007, Clements 2011) similar to NW Australia, suggesting W Burma is mysterious Argoland, not W Java-E Sulawesi. E Java originated from NW Australia and W Sulawesi from Birds Head)

Zhang, Y. & W.D. Mooney (2023)- Regional crustal structure of Indonesia from receiver functions. Tectonophysics 865, 230033, p. 1-12.
(New maps of crustal thickness and bulk Vp/Vs ratio in Indonesia and surrounding area from P-wave receiver functions at 36 seismic stations by USGS. Thickest crust (~38 km) beneath Flores- Timor Islands, S Maluku (Ambon), and neighboring N-most Australia. Thinnest crust (~24 km) underNorth Borneo, also Halmahera. Vp/Vs ratios ~1.79, with high values (>1.85) along Banda-Sunda arc-trench system (also Aceh, Timor, Banda, N Sulawesi, Sabah, Philippines, etc.) attributed to: (1) presence of mafic island arc and oceanic crust and (2) partial melting in this volcanic region, causing larger decrease in S-wave velocities)

Zhao, Q., Y. Yan, A. Carter, P.D. Clift, J. Wu, J.B. Asis, Z. Zhu, S. Gou & Y. Zhou (2025)- Interaction between the Tethyan and Paleo-Pacific tectonic domains in Southeast Asia: late Triassic initiation of an inward-dipping double subduction system. Tectonics 44, 8, e2024TC008762, p. .
(manuscript online at: https://discovery.ucl.ac.uk/id/eprint/10212584/1/1016988_2_merged_1753084571.pdf)
(Zircon U-Pb and Hf data sets from Borneo (Paleo-Pacific domain) and Sumatra (Tethyan domain) suggest isotopically juvenile magmatism was active on both sides of Sundaland, due to inward-dipping double subduction since latest Triassic when Indochina collided with Sibumasu, as evidenced by positive shift in zircon εHf(t) values from both Cenozoic sediments and Mesozoic magmatic rocks in Sumatra and Borneo. Triassic-Cretaceous values in Borneo show broad range, and Sumatra narrower variability, likely reflecting differences in slab dip angles between subducting Meso-Tethys and Paleo-Pacific oceanic lithosphere. After 80 Ma double subduction system was disrupted, marked by cessation of arc magmatism in Borneo while isotopically juvenile magmatism continued on Sumatra. SE Asia developed more juvenile crust due to large-scale upper plate extension driven by inward-dipping double subduction)

Zhao, S., S. McClusky, P.R. Cummins, M.S. Miller & H. Nugroho (2023)- New insights into crustal deformation of the Indonesia-Australia-New Guinea collision zone from a broad-scale kinematic model. J. of Geophysical Research: Solid Earth 128, e2022JB024810, p. 1-20.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/pdfdirect/10.1029/2022JB024810)
(200 GPS observations of crustal motion and 492 earthquake slip vectors allow estimates of motion of plates and microplates in Indonesia-Australia-New Guinea collision zone. With new model for development of Cendrawasih Embayment in north-central New Guinea, by CCW rotation of Bird's Head Block and SW-directed convergence along Lowlands fault (along E side of Cenderawasih Bay))

Zimmermann, S. & R. Hall (2014)- Provenance of Mesozoic sandstones in the Banda Arc, Indonesia. Proc. 38th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, IPA14-G-301, p. 1-13.
(online at: http://searg.rhul.ac.uk/pubs/zimmermann_hall_2014%20Banda%20arc%20sandstones.pdf)
(Triassic and Jurassic sandstones from outer Banda Arc islands Timor, Babar and Tanimbar texturally immature, with volcanic quartz. Heavy minerals mainly from acidic igneous and metamorphic rocks and also ultramafic material. Zircon populations similar to Triassic sandstones of Birds Head, not nearby Australian continent. Cretaceous sandstones from Sumba, E Timor and Tanimbar with zircons suggesting reworking of

Triassic and Jurassic sediments, but also contain Jurassic and Cretaceous zircons. These represent fragments rifted from Australian margin in Late Jurassic and added to SE Asia in Late Cretaceous which record volcanic activity associated with rifting and accretion to active Sundaland margin)

Zimmermann, S. & R. Hall (2016)- Triassic and Jurassic sandstones in the Banda Arc: provenance and correlations with the Australian NW Shelf. Proc. 40th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, IPA16-77-G, p. 1-18.
(online at: http://searg.rhul.ac.uk/pubs/zimmermann_hall_2016%20Banda%20sandstones%20IPA.pdf)
Most Triassic-Jurassic sandstones of Banda Arc between Timor and Tanimbar quartz-rich and of recycled origin and/or continental affinity, but commonly texturally immature and with volcanic quartz and lithics. Heavy mineral assemblages dominated by rounded stable minerals, but also angular grains and origin from acid igneous and metamorphic sources. Detrital zircon ages Archean-Mesozoic, suggesting source mainly from Birds Head/ Sula Spur, W and C Australia in Triassic. In Jurassic new local sources close to Timor and recycled NW Shelf material. Tanimbar Islands and Babar sediment came from both Australian continent and Birds Head. Sandstones in Timor dominant acid igneous signature in E and metamorphic sources in W (NB: no mention of key papers on similar topic by Ely 2009, 2014, Zobell 2007, Kwon et al. 2014, JTvG))

Zimmermann, S. & R. Hall (2016)- Provenance of Triassic and Jurassic sandstones in the Banda Arc: petrography, heavy minerals and zircon geochronology. Gondwana Research 37, p. 1-19.
(manuscript online at: https://pure.royalholloway.ac.uk/ws/portalfiles/portal/26526243/Zimmermann_Hall_2016_Provenance_Banda_Ssts_Trias_Jur.pdf)
(Same as Zimmermann and Hall 2016, above)

Zimmermann, S. & R. Hall (2019)- Provenance of Cretaceous sandstones in the Banda Arc and their tectonic significance. Gondwana Research 67, p. 1-20.
(Cretaceous sandstones from Sumba, Timor and Tanimbar deposited in SE Sundaland. Syn-sedimentary Cretaceous (68- 140 Ma) sources probably Schwaner Mts in SW Borneo and Sumba. Material from older recycled sediments from Bird's Head, W and C Australia, and local sources close to Timor)

Zimmermann, S., C. Mark, D. Chew & P.J. Voice (2018)- Maximising data and precision from detrital zircon U-Pb analysis by LA-ICPMS: The use of core-rim ages and the single-analysis concordia age. Sedimentary Geology 375, p. 5-13.
(online at: https://www.academia.edu/90061033/Maximising_data_and_precision_from_detrital_zircon_U_Pb_analysis_by_LA_ICPMS_The_use_of_core_rim_ages_and_the_single_analysis_concordia_age)
(Cores and rims of detrital zircon crystals may yield different U-Pb ages. Discussion with examples of Triassic sediment samples from Banda Arc (Timor, Babar, Tanimbar), with age peaks at ~1847 Ma (N-C Australian provenance) ~1540 Ma and 1140 Ma (W Australian origin), peaks between 600 and 402 Ma, and major peaks 312, 285, 269 and 240 Ma (= Permian- early M Triassc prolonged magmatic activity in Birds Head of New Guinea). Rim age peaks often similar, but older ages of crystal cores typically not recorded in rim overgrowths)

Zollinger, H. (1857)- Over het begip en den omvang eener “Flora Malesiana”. Natuurkundig Tijdschrift voor Nederlandsch-Indie 13, p. 293-322.
(‘About the concept and distribution of a ‘Flora Malesiana’. Overview with map of floral boundaries in the’Malesian (Indonesian) floristic region’, as proposed by Swiss naturalist Heinrich Zollinger across Indonesia. (one of the floral boundaries identified within the Malayan floral realm closely follows what later became known as the ‘Wallace Line’. See also essay on “Wallace versus Zollinger” by botanist H.J. Lam in 1937; JTvG))

Zollinger, H. (1857)- Uber den Begriff und Umfang einer “Flora Malesiana”. Vierteljahrsschrift Naturforschenden Gesellschaft Zurich 2, p. 317-349. + map
(online at: https://ngzh.ch/wp-content/uploads/2024/04/Malesiana.pdf))
(‘About the concept and distribution of a ‘Flora Malesiana’. German-language version of Dutch-language paper above)

Zollinger, H. (1858)- Der Indische Archipel. Petermann's Geographische Mitteilungen 1, p. 56-63.
('The Indies Archipelago'. Early description of geography and geology of the Indonesian archipelago (mainly on volcanoes))

Zuhair, M., T. Gollapalli, F.A. Capitanio, P.G. Betts, J.C. Graciosa (2022)- The role of slab steps on tectonic loading along subduction zones: inferences on the seismotectonics of the Sunda convergent margin. Tectonics 41, 9, e2022TC007242, p. 1-24.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/pdf/10.1029/2022TC007242)
(Comparison of seismotectonics and available slab pull forces along Sunda convergent margin shows enigmatic inverse relationship: upper plate thickening and seismicity magnitude highest along Sumatra-Andaman segment, where slab is < ~300 km; but are negligible along Java segment, where slab reaches to ~660 km

Zwierzycki, J. (1925)- Overzicht van de Trias-formatie in Nederlandsch Indie. Verhandelingen Geologisch-Mijnbouwkundig Genootschap Nederland Kolonien, Geologische Serie, 8 (Gedenkboek Verbeek, memorial volume), p. 633-648.
(online at: https://books.google.com/books?id=Yy0RAAAAIAAJ&pg)
('Overview of the Triassic formations in the Netherlands Indies'. Complete Triassic series found only on Timor, where it is conformable on Permian marine beds. U Triassic present on Savu/ Roti, Timor, Leti/Babar, Ceram, Ambon, Misool, Buru, Buton, Borneo, Lingga, Sumatra and Malay Peninsula. Everywhere in Indonesia U Triassic developed in 'Alpine (Tethyan) facies'. Very similar and partly bituminous and intensively folded Late Triassic (Carnian-Norian) deep marine limestones in Buton, Buru and Seram (and possibly also Timor). With one overview map)

Zwierzycki, J. (1928)- The stratigraphy of the coal and oil fields in the Netherlands East Indies. Proc. 3rd Pan-Pacific Science Congress, Tokyo, November 1926, National Research Council of Japan, 2, p. 1572-1593.
(online at: https://books.google.com/books?id=Y4wKAAAAIAAJ)
(Exploitable coal and oil in Netherlands Indies only in Tertiary deposits. Most of the workable coal is in Paleogene deposits, all exploitable oil is in Neogene beds. Best conditions for these accumulations existed along margins of the geosyncline that surrounded the 'Sunda Peninsula'. Etc/)

Zwierzycki, J. (1930)- Toelichting bij de geotektonische kaart van Nederlandsch-Indie. Jaarboek Mijnwezen Nederlandsch-Indie 58 (1929), Verhandelingen, p. 347-371.
('Explanatory notes of the geotectonic map of the Netherlands East Indies'. With map at scale 1:5,000,000. Assumes all metamorphic rocks are Paleozoic or olderage and maps several 'orogenic periods':mid-Cretaceous (Sumatra), base Eocene?, Miocene (East), Late Pliocene (West part of archipelago))

Zwierzycki, J. (1930)- "Tektonische hoofdlijnen", een nieuwe goedkoope geologische methode tot oplossing van petrographische en tektonische vraagstukken en opsporing van aardolie en tin. De Mijningenieur 11, p. 185-

Zwierzycki, J. (1957)- Pojecie geosynkliny w swietle nowszych badan Indonezji. Kosmos, B, 3, p. 1-9.
('The concept of geosynclines in the light of more recent research from Indonesia'. In Polish)

I.2. SE ASIA REGIONAL

I.2. SE Asia Regional Geology, Tectonics, Gondwanan-Tethyan regional paleo(bio)geography

Achache, J., A. Abtout & J.J. Mouel (1987)- The downward confirmation of Magsat crustal anomaly field over Southeast Asia. J. of Geophysical Research 92, B11, p. 11584-11596.
(Magnetic field data over SE Asia acquired by Magsat satellite. Stable continental blocks generally associated with positive anomalies, and intervening collision belts correspond to negative anomalies. A prominent low is observed above Himalaya and Tibet Plateau, confirming anomalous crustal and thermal structure of this area)

Achache, J., V. Coutillot & J. Besse (1983)- Paleomagnetic constraints on the Late Cretaceous and Cenozoic tectonics of Southeast Asia. Earth Planetary Science Letters 63, p. 123-136.
(online at: https://www.academia.edu/20265943/Paleomagnetic_constraints_on_the_late_Cretaceous_and_Cenozoic_tectonics_of_southeastern_Asia)
(Cretaceous- Cenozoic paleomagnetic data show negligible rotation of S China and CW rotation of Indochina, consistent with Tapponnier India indentation model. Malaya and Borneo data can be reconciled with model, but less straightforward. Large CCW rotation of S Tibet implies rotation with India during collision. M Cretaceous reconstruction of S margin of Asia shows continuity of geological features in Tibet and Indochina, with active subduction of Indian plate oceanic crust taking place to S at subtropical latitudes)

Acharyya, S.K. (1998)- Break-up of the greater Indo-Australian continent and accretion of blocks framing South and East Asia. J. Geodynamics 26, 1, p. 149-170.
(online at: https://www.academia.edu/32329634/Break_up_of_the_Greater_Indo_Australian_Continent_and_accretion_of_blocks_framing_South_and_East_Asia)
(Plate tectonic history of SE Asia, with emphasis on India-Andaman region. Tibetan and 'Sibumasu' continental blocks rifted from N margin of Gondwanan Indo-Australia in Permian; IndoBurma-Andamans, Sikuleh, Lolotoi micro-continents in Late Jurassic. Tibetan and Sibumasu blocks drifted N in M-L Permian, opening Neo-Tethys. Indian and Australian continents separated in Cretaceous opening up Indian Ocean and closing Tethyan ocean. Etc. Ophiolite trail on IBA does not represent E suture of Indian continent. Convergence between Australian continent and Indonesian Arc emplaced Lolotoi continental rocks. Maubisse exotic blocks and ophiolitic rocks as nappes over Timor shelf, which possibly remained attached to Australian continent)

Acharyya, S.K. (2000)- Break up of Australia-India-Madagascar Block, opening of the Indian Ocean and continental accretion in Southeast Asia with special reference to the characteristics of the peri-Indian collision zones. Gondwana Research 3, p. 425-443.
(Tibetan and Sibumasu- W Yunnan continental blocks were located near proto-Himalayan part of Indian continent, rifted and drifted from N margin of E Gondwana continent in Late Paleozoic. Indo-Burma-Andaman, Sikule and Lolotoi blocks rifted and drifted from same margin in Late Jurassic, followed by break-up of Australia-India-Madagascar continental block in Cretaceous)

Agematsu, S. & T Oo (2023)- Ordovician geology of the Sibumasu Block, Southeast Asia. In: T. Servais et al. (eds.) A global synthesis of the Ordovician System, Part 2, Geological Society, London, Special Publ. 533, p. 519-544.
(Ordovician stratigraphy of Sibumasu Block, which formed part of equatorial peri-Gondwana during E Paleozoic. U Cambrian sequences dominated by coarse shallow marine clastics. Lower Ordovician fine-grained clastics in Shan Plateau, shallow-marine clastics in N and W Thailand and shallow-marine carbonates in S Thailand- NW Malaysia. M Ordovician carbonates. U Ordovician deeper environments. Sibumasu Block adjacent to W Australia throughout E Paleozoic).

Ager, D.V.A. & D.L. Sun (1988)- Distribution of Mesozoic brachiopods on the northern and southern shores of Tethys. Palaeontologia Cathyana 4, p. 23-51.
(Late Triassic brachiopod Misolia widely distributed in S Tethys; recorded from Middle East to E Indonesia (Misool, Timor, Seram). Halorella/ Timorhynchia more typical of Late Triassic of N Tethys margin)

Ahmad, S., W. Jalal, F. Ali, M. Hanif, Z. Ullah, S. Khan, A. Ali, I.U. Jan & K. Rehman (2015)- Using larger benthic foraminifera for the paleogeographic reconstruction of Neo-Tethys during Paleogene. Arabian J. Geosciences 8, 7, p. 5095-5110.
(Comparison of Paleogene larger foraminifera from E part of NeoTethys in Kohat Basin of Pakistan compared with W, C Neo-Tethys to establish Paleogene migration pathways in Neo-Tethys. LBF species mostly confined to blocks derived from Gondwana (Iran, Iraq, Pakistan, India, Indonesia) and Laurasia (Italy, France, Spain), with only few on margin of Gondwanan continents (Oman). Includes brief review of Indonesian LBF)

Ali, J.R. (2006)- Biogeographical and geological evidence for a smaller, completely-enclosed Pacific basin in the Late Cretaceous: a comment. J. of Biogeography 33, 9, p. 1670-1674.
(Critical discussion of McCarthy 2005 paper that describes Pacific history in expanding earth model))

Ali, J.R., J.C. Aitchison, H.M.Z. Cheung, S.S.Y. Chik & Y. Sun (2012)- Late Paleozoic development of Gondwana: detachment of the >13,500-km-long Cimmerian super terrane and its drift to Asia. Proc. First Int. Symposium of IGCP-589, Xi'an, China 2012, Acta Geologica Sinica 33, Supplement 1, p. 1-2. *(Abstract only)*
(online at: http://igcp589.cags.ac.cn/pdf/02-ALI%20Jason.pdf)
(Presentation online at: http://rwg-tag.bravehost.com/Conferences/geocon/ppt/1120-1140%20Ali.pdf)
(Cimmerian terrane almost unbroken chain stretching >13,500 km, from S Europe, via Middle East, Afghanistan, Tibet, SW China, Myanmar to W Indonesia. Example of 'sliver terrane' dwarfing other examples like Palawan Block in W Philippines and Lord Howe Rise in Tasman Sea. Dispersal from Gondwana in E Permian. Sibumasu lay offshore of Australia; Qiangtang and Lhasa off Greater India- SE Arabia)

Archbold, N.W. (1983)- Permian marine invertebrate provinces of the Gondwanan realm. Alcheringa 7, p. 59-73.
(Permian chonetidine brachiopods allow distinction of five Permian Gondwanan faunal provinces: Andean, Paratinan, Austrazean (E Australia- New Zealand), Westralian (W Australia) and Cimmerian (Cimmerian terranes, from Tunisia, Himalayas, Thailand, Sumatra, Leti to W Papua). With description of Waterhouseiella n.gen. for Waagenites speciosus)

Archbold, N.W. (1987)- South-western Pacific Permian and Triassic marine faunas: their distribution and implications for terrane identification. In: E.C. Leith & E. Scheibner (eds.) Terrane accretion and orogenic belts, American Geophysical Union (AGU), Geodynamics Series 19, p. 119-127.
(Three SW Pacific Permian faunal provinces: (1) Cimmerian (Arabia to Irian Jaya, Timor: cold earliest Permian with bivalve Eurydesma, etc., warm-tropical later in E Permian), (2) Westralian (cold earliest Permian followed by temperate faunas, with tropical elements only in Late Permian) and (3) Austrazean (E Australia- New Zealand, New Caledonia), with cold and cool temperate conditions throughout Permian. Marine Triassic faunas two provinces: (1) Tethyan- cosmopolitan, (2) cool Maori Province in New Zealand (not including Torlesse))

Archbold, N.W. (1998)- Correlations of Western Australian Permian and Permian Ocean circulation patterns. Proc. Royal Society of Victoria 110, p. 85-106.

Archbold, N.W. (1999)- Permian Gondwanan correlations: the significance of the western Australian marine Permian. J. African Earth Sciences 29, 1, p. 63-75.
(Conodonts, fusulinid foraminifera and ammonoids, commonly used for Permian correlations, are absent or rare in Gondwanan marine sequences. Marine faunas of Permian exhibit pronounced provincialism. W Australia marine sections 18 brachiopod zones and offer correlation interface between new global standard and extensive Permian sequences of Gondwana)

Archbold, N.W. (2000)- Palaeobiogeography of the Australasian Permian. In: A.J. Wright et al. (eds.) Palaeobiogeography of Australasian faunas and floras, Memoir Assoc. Australasian Palaeontologists (AAP) 23, p. 287-310.

Archbold, N.W. (2001)- Pan-Gondwanan, Early Permian (Asselian-Sakmarian-Akastinian) correlations. In: R.H. Weiss (ed.) Contributions to Geology and Paleontology of Gondwana in honour of Helmut Wopfner, Cologne 2001, p. 29-39.
(Correlation tables of E Permian formations and faunas from Gondwanan and peri-Gondwanan regions. Incl. Malay Peninsula and Timor Somohole ammonoid fauna (E Sakmarian?) and Bisnain brachiopod fauna (Late Sakmarian?)

Archbold, N.W. (2001)- Wallace lines in eastern Gondwana: palaeobiogeography of Australasian Permian brachiopoda. In: I. Metcalfe, J.M.B. Smith et al. (eds.) Faunal and floral migrations and evolution in SE Asia-Australasia, Balkema, Lisse, p. 73-83.
(Australian continent was major component of NE Gondwana in Permian. Surrounding what is now Australia, were additional elements of NE Gondwana that are now incorporated into New Zealand, New Caledonia, New Guinea, Timor, SE Asia, Himalaya and S Tibet. Pronounced provincialism of global marine faunas in Permian. Brachiopoda can be used to define Westralian and Austrazean provinces)

Archbold, N.W. (2002)- Peri-Gondwanan Permian correlations: the Meso-Tethyan margins. In: M. Keep & S.J. Moss (eds.) The sedimentary basins of Western Australia 3, Proc. West Australian Basins Symposium, Perth 2002, p. 223-240.
(Permian of 16 regions of NE Gondwana compared with Australian continent. Paleoclimatic changes and tectonic events: (1) Asselian- E Artinskian change from cold to temperate environments, associated with basaltic volcanism and initial rifting of peripheral N Gondwanan margin; (2) Late Artinskian-Kungurian warming with onset of carbonate deposition in several Cimmerian terranes. Basaltic volcanism in several terranes indicative of rifting and opening of Meso-Tethys; (3) Roadian (Late Ufimian) and (4) Wordian-Capitanian: widespread, subtropical, marine carbonates on Cimmerian blocks as they drifted N and on N parts of Meso-Tethys S margin. Equivalent carbonates in subsurface W Australia. Andesitic volcanism in E Australia; (5) Wuchiapingian: marine transgressions extending into NW basins of Australia; (6) Changhsingian: minor marine transgressive events in Trans-Himalaya with Selong section of Tibet most complete Permo-Triassic for S Meso-Tethys margin)

Archbold, N.W., C.J. Pigram, N. Ratman & S. Hakim (1982)- Indonesian Permian brachiopod fauna and Gondwana-South-East Asia relationships. Nature 296, p. 556-558.
(First description of late E Permian articulate brachiopods in Birds Head. Assemblage similar to Thailand Rat Buri Limestone, suggesting geographical proximity of Thailand and NW Irian Jaya in E Permian)

Archbold, N.W. & G.R. Shi (1995)- Permian brachiopod faunas of Western Australia: Gondwanan-Asian relationships and Permian climate. J. Southeast Asian Earth Sciences 11, 3, p. 207-215.
(W Australian Permian brachiopod faunas mixture of Gondwanan, endemic Westralian and Asian (Tethyan) genera. Presence of Tethyan genera largely temperature dependent; no apparent geographical barriers to migration of such genera into intracratonic basins of W Australia. Paleotemperature curve indicates peak warm conditions in Sterlitamakian and Late Baigendzhinian and subtropical conditions in Dzhulfian)

Archbold, N.W. & G.R. Shi (1996)- Western Pacific Permian marine invertebrate palaeobiogeography. In: Z.X. Li, I. Metcalfe & C.M. Powell (eds.) Breakup of Rodinia and Gondwanaland and assembly of Asia, Australian J. Earth Sciences 43, 6, p. 635-641.
(Permian of W Pacific 4 provinces for Asselian-Tastubian (Indoralian, Himalayan, Cathaysian, Verkolyma), 6 for Sterlitamakian-Aktastinian (Austrazean, Westralian, Cimmerian, Cathaysian, Sino-Mongolian, Verkolyma), 7 for Baigendzhinian- E Kungurian (Austrazean, Westralian, Cimmerian- with Sibumasu and Himalayan subprovinces- Cathaysian, Sino-Mongolian, Verkolyma) and 3 for Kazanian-Midian (Austrazean, Cathaysian, Verkolyma). Changing pattern of provincialism best understood in terms of evolution of Sino-Mongolian Sea in N and rift-drift history of Cimmerian continental blocks in S, and climate amelioration during Permian)

Arias, C. (2006)- Northern and Southern Hemispheres ostracod palaeobiogeography during the Early Jurassic: possible migration routes. Palaeogeogr. Palaeoclim. Palaeoecology 233, p. 63-95.
(Australian E Jurassic ostracod faunas similar to W Tethyan and C European assemblages, probably indicating communication route along western Tethys, aided by action of western currents)

Asama, K. (1976)- *Gigantopteris* flora in Southeast Asia and its phytopalaeogeographic significance. In: T. Kobayashi & R. Toriyama (eds.) Geology and Palaeontology of Southeast Asia, University of Tokyo Press, 17, p. 191-207.
(Gigantopteris flora is typical Cathaysian flora, best developed in N and NE China and Korea, but also in Yunnan and extending S to Malay Peninsula (Johore). Gigantopteris species described from E Permian Jambi flora of W Sumatra by Jongmans & Gothan 1935 differ from typical Gigantopteris flora. Djambi flora may still belong to Cathaysian flora, but probably older than typical Gigantopteris flora. W New Guinea Permian flora most likely part of Glossopteris flora)

Asama, K. (1984)- *Gigantopteris* flora in China and Southeast Asia. In: T. Kobayashi et al. (eds.) Geology and Palaeontology of Southeast Asia, University of Tokyo Press, 25, p. 311-323.
(Mainly on classification and evolution of 'Cathaysian' Permian Gigantopteris flora. C Sumatra Permian Jambi flora typical Asian Gigantopteris flora, not Gondwanan Glossopteris flora)

Audley-Charles, M.G. (1983)- Reconstruction of eastern Gondwanaland. Nature 306, p. 48-50.
(Model of E Gondwanaland on basis of distribution of floras and faunas, lithofacies patterns and identification of Triassic magmatic arc that characterized E margin of Gondwanaland. Continental fragments that rifted from N Australia-New Guinea in Jurassic identified as S Tibet-Burma-Thailand-Malaya and Sumatra. Sumatra attached to New Guinea through Triassic. Original site of deposition of 'Maubisse' subtropical Permian limestones and tropical Late Triassic limestones, overthrust onto N margin of Australia in late Cenozoic collision, is located in this greater Gondwanaland)

Audley-Charles, M.G. (1988)- Evolution of the southern margin of Tethys (North Australia region) from Early Permian to Late Cretaceous. In: M.G. Audley-Charles & A. Hallam (eds.) Gondwana and Tethys. Geological Society, London, Special Publ. 37, p. 79-100.
(online at: http://searg.rhul.ac.uk/pubs/audley-charles_1988%20N%20Australia%20evolution.pdf)
(Review of Mesozoic stratigraphies of Banda terranes and Permo-Carboniferous- Cretaceous paleogeography. Mid-Permian rift event removed continental blocks now in Asia from Gondwana. Present NW Australia- New Guinea margin formed in Jurassic with breakup of S. Tibet/Burma/Malaya/ W and E Borneo/Sumatra/W Sulawesi/ Banda allochthons. E Sulawesi/ Banggai-Sula/ Kemum still part of N Guinea margin in Early Cretaceous. Margin E of Scott Plateau modified by Tertiary collisions with arc systems)

Audley-Charles, M.G., P.D. Ballantyne & R. Hall (1988)- Mesozoic-Cenozoic rift-drift sequence of Asian fragments from Gondwanaland. Tectonophysics 155, p. 317-330.
(online at: http://searg.rhul.ac.uk/pubs/audley-charles%20et%20al%201988.pdf)
(Reconstruction of continental blocks dispersal from E Gondwanaland from Latest Jurassic- Late Miocene. Burma-Malaya-Sumatra rifted off New Guinea in Jurassic and colliding with SE Asia in Late Cretaceous (clearly too late; JTvG), etc.)

Audley-Charles, M.G. & R. Harris (1990)- Allochthonous terranes of the Southwest Pacific and Indonesia. Philosophical Transactions Royal Society London, A 331 (1620), p. 571-587.
(online at: http://searg.rhul.ac.uk/pubs/audley-charles_harris_1994%20allochthonous%20terranes.pdf)
(Mesozoic breakup of Gondwana and subsequent collisional events led to formation and emplacement of allochthonous terrranes in fold-thrust mountain belts. Many allochthonous terranes of SW Pacific and E Indonesia accreted during last 3 Ma))

Audley-Charles, M.G. & R. Harris (1991)- Allochthonous terranes of the Southwest Pacific and Indonesia. In: J.F. Dewey, I.G. Gass et al. (eds.) Allochthonous terranes, Cambridge Unversity Press, Cambridge, p. 115-127.
(Same paper as Audley-Charles & Harris (1990), above)

Bansal, M., R.J. Morley, S.K. Nagaraju, S. Dutta, A. K. Mishra, J. Selveraj et al. (2022)- Southeast Asian Dipterocarp origin and diversification driven by Africa-India floristic interchange. Science 375, 455-460, p. 1-6.

(Documentation of tropical-African origin of Dipterocarpaceae in mid-Cretaceous and dispersal to India during Late Maastrichtian and Paleocene. India-Asia collision facilitated dispersal of dipterocarps from India to similar climatic zones in SE Asia)

Barrier, E., B. Vrielynck, J.F. Brouillet & M.F. Brunet (2018)- Paleotectonic reconstruction of the Central Tethyan Realm. Tectonono-sedimentary palinspastic maps from Late Permian to Pliocene. Commission for the Geological Map of the World (CCGM/CGMW), Paris, p. 1-21.
(online at: https://www.researchgate.net/publication/328233233_Paleotectonic_Reconstruction_of_the_Central_Tethyan_Realm_Tectonono-Sedimentary-Palinspastic_maps_from_Late_Permian_to_Pliocene)
(Atlas of 20 paleogeographic/ paleotectonic maps from E Mediterranean- India since Late Permian (no SE Asia) (DARIUS project maps))

Beckinsale, R.D. (1979)- Granite magmatism in the tin belt of South-East Asia. In: M.P. Atherton & J. Tarney (eds.) Origin of granite batholiths: geochemical evidence, Shiva Press, Orpington, p. 34-44.

Ben-Avraham, Z. (1978)- The evolution of marginal basins and adjacent shelves in East and Southeast Asia. In: S. Uyeda (ed.) Active plate boundaries of the Western Pacific, Tectonophysics 45, p. 269-288.
(In Mesozoic W Pacific Ocean and E Indian Ocean were parts of Tethys Sea, moving N relative to Antarctica, causing E-W Mesozoic ridge system, E-W trending magnetic anomalies and N-S transform faults. In Late Cretaceous-Eocene segments of spreading ridge gradually submerged at trenches to N, causing gradual change in direction of Pacific plate motion, separating Pacific and E Indian Ocean plates. Only remnant of Mesozoic ridge system today at W Philippine Basin)

Berry, W.B.N. & A.J. Boucot (1972)- Correlation of the Southeast Asian Silurian rocks. Geological Society of America (GSA), Special Paper 137, p. 1-35.

Besse, J. & V. Courtillot (1988)- Paleogeographic maps of the continents bordering the Indian Ocean since the Early Jurassic. J. of Geophysical Research 93, B10, p. 11791-11808.
(Plate reconstructions primarily driven by paleomagnetism)

Bird, P. (2003)- An updated digital model of plate boundaries. Geochem. Geophysics Geosystems 4, 3, 1027, p. 1-52.
(online at: http://onlinelibrary.wiley.com/doi/10.1029/2001GC000252/epdf)
(Global plate boundaries, showing 14 larger plates (incl. Australia, Eurasia, Pacific, Philippine Sea) and 38 small plates (in SE Asia-SW Pacific: Sunda, Burma, Molucca Sea, Banda Sea, Timor, Birds Head, Maoke, Caroline, Mariana, N Bismarck, Manus, S Bismarck, Solomon Sea, Woodlark, New Hebrides (Maoke Plate is newly-defined small tectonic plate in West Papua, underlying western Central Range/ Mamberamo area to Cenderawasih Bay)

Blendinger, W., W.M. Furnish & B.F. Glenister (1992)- Permian cephalopod limestones, Oman Mountains: evidence for a Permian seaway along the northern margin of Gondwana. Palaeogeogr. Palaeoclim. Palaeoecology 93, p. 13-20.
(Cephalopod limestones of M Permian (M Guadalupian, Wordian) age at base of Hawasina nappes in Oman Mts are condensed sequence on N side of Arabian platform (or allochthonous unit thrust onto N margin). Ammonoid and conodont faunas remarkably similar to W Mediterranean (Siclily Sosio Lst) and Timor, suggesting unrestricted faunal exchange in Permian seaway along distal pelagic N margin of Gondwana (or distal margins of Cimmerian terranes?; JTvG))

Bodet, F. & U. Scharer (2000)- Evolution of the SE Asian continent from U-Pb and Hf isotopes in single grains of zircon and baddeleyite from large rivers. Geochimica Cosmochimica Acta 64, p. 2067-2091.
(Three Paleoproterozoic crust-formation episodes in mainland SE Asia (2.5 Ga, 2.2-2.3 Ga and ~1.9 Ga), identified from zircons of Red River, Mekong, Salween and Irrawaddy Rivers)

Bolotov, I.N., R. Pasupuleti, N.V. Subba Rao, S.K. Unnikrishnan, Nyein Chan, Zau Lunn, Than Win et al. (2022)- Oriental freshwater mussels arose in East Gondwana and arrived to Asia on the Indian Plate and Burma Terrane. Nature Scientific Reports 12, 1518, p. 1-26.
(online at: https://www.nature.com/articles/s41598-022-05257-0)
(Distributions of f reshwater mussels (Unionidae) in S-SE Asia. Indian Subcontinent harbors taxonomically poor fauna of Parreysiinae, which most likely originated in E Gondwana in Jurassic and representatives arrived to Asia on two Gondwanan fragments: Indian Plate and Burma Terrane. Burma Terrane was connected with Indian Plate until end-Cretaceous. During Paleogene, blocks served as isolated evolutionary hotspots for freshwater mussels. Burma Terrane collided with mainland Asia in Late Eocene, and played major role as Gondwanan "biotic ferry" alongside with Indian Plate)

Bose, S., W.P. Schellart, V. Strak, J.C. Duarte & Z. Chen (2023)- Sunda subduction drives ongoing India-Asia convergence. Tectonophysics 849, 229727, p. 1-13.
(online at: https://research.vu.nl/ws/portalfiles/portal/292036688/Sunda_subduction_drives_ongoing_India-Asia_convergence.pdf)
(Active subduction of Indo-Australian plate along Sunda subduction zone probably the main driver of continued India-Asia convergence, Indian indentation, and consequent growth of Himalaya-Tibet mountains, and also the present-day E-ward crustal displacement of SE Asia. Experiments show that at least 880 km of N-ward indentation of India would not have ensued in absence of lateral subduction zones)

Boucot, A. (2003)- Some thoughts about the Shan-Tai Terrane. In: N. Mantajit (ed.) Proc. Symposium on Geology of Thailand, Bangkok 2002, Dept. Mineral Resources (DMR), p. 4-13.
(online at: http://library.dmr.go.th/library/Proceedings-Yearbooks/M_1/2002/6368.pdf)
(Review of stratigraphy and fossils of Silurian- Permian of Shan-Tai (= Sibumasu) terrane of W Thailand. Rel. cool climate 'Gondwanan' faunas through E Permian. Includes carbonate-rich Ordovician, Silurian black graptolite shales, E Devonian carbonates and 'tentaculite' mudstones, E Permian pebbly mudstones, etc.)

Boucot, A.J. (2007)- What happens at the northern end of the Shan-Thai terrane, where does it go from there. In: W. Tantiwanit (ed.) Int. Conference on Geology of Thailand: Towards sustainable development and sufficiency economy (GEOTHAI'07), Bangkok, Dept. Mineral Resources (DMR), p. 373-377.
(online at: http://library.dmr.go.th/library/Proceedings-Yearbooks/M_1/2007/12752.pdf)
(Scattered Cambrian- E Devonian lithofacies and biogeographic data from Himalayan area (Nepal, Xizang= Tibet) consistent with Shan-Thai Terrane (= Sibumasu) having originally been E extension of former. E extension of S end of Shan-Thai Terrane in Sumatra is poorly known, with S half of New Guinea being a possibility)

Brandon-Jones, D. (2001)- Borneo as a biogeographic barrier to Asian-Australasian migration In: I. Metcalfe et al. (eds.) Faunal and floral migrations and evolution in SE Asia-Australasia. Balkema, Lisse, p. 365-372.

Brayard, A., G. Escarguel & H. Bucher (2007)- The biogeography of Early Triassic ammonoid faunas: clusters, gradients and networks. Geobios 40, p. 749-765.
(E Triassic ammonoid assemblages, incl. Timor, which is 'highly connected' with Afghanistan and S China, defining an equatorial Tethyan group)

Brayard, A., G. Escarguel, H. Bucher & T. Bruhwiler (2009)- Smithian and Spathian (Early Triassic) ammonoid assemblages from terranes: paleoceanographic and paleogeographic implications. J. Asian Earth Sciences 36, p. 420-433.
(Cluster analysis of E Triassic ammonoid faunas. Timor grouped with Afghanistan, South China, Oman, Iran, etc., as S Tethyan cluster. (Very little detail on locations/ origin of samples; JTvG))

Brookfield, M.E. (1996)- Paleozoic and Triassic geology of Sundaland. In: M. Moullade & A.E.M. Nairn (eds.) The Phanerozoic geology of the world, 1, The Palaeozoic, B, Elsevier, Amsterdam, p. 183-264.

Brookfield, M.E. (1996)- Reconstruction of Western Sibumasu. Proc. International Symposium Geology of Southeast Asia and adjacent areas, Hanoi 1995, Journal of Geology, Hanoi, Special Issue, Geological Survey of Vietnam, B, p. 65-80.
(Core of Sibumasu terrane (Shan Plateau, Kanchanaburi, W Malaya) is S-facing Paleozoic passive margin, rifted off Gondwanaland in Permian and collided with Indochina in Triassic-E Jurassic. Equivalent of Qiantang Block of C Tibet)

Brookfield, M.E. & V.J. Gupta (1988)- The Devonian of Northern Gondwanaland: a Himalayan viewpoint and terrane analysis. In: N.J. MacMillan et al. (eds.) Devonian of the World, Proc. 2nd International Symposium on the Devonian System, Calgary, 1, Regional Syntheses, Canadian Society of Petroleum Geologists, Memoir 14, p. 579-589.
(Microcontinents that rifted off N Gondwana like Lut, Helmand, Nowshera, Karakorum, High Himalaya and Thai-Malaya terranes have Devonian stratigraphies indicating they were part of Gondwanaland in Devonian)

Buerki, S., F. Forest & N. Alvarez (2014)- Proto-South-East Asia as a trigger of early angiosperm diversification. Botanical J. Linnean Society, London, 174, p. 326-333.
(online at: https://academic.oup.com/botlinnean/article/174/3/326/2416344)
(Angiosperms (flowering seed plants) originated abruptly in E Cretaceous (Hauterivian), followed by rapid diversification in Hauterivian-Aptian. Islands in SE Asia region today probably played major role in angiosperm diversification in Late Jurassic- E Cretaceous (but no discussion of support from actual fossil botanical records of SE Asia; HvG)

Buffetaut, E. (1981)- Elements pour une histoire paleobiogeographique du Sud-est Asiatique: l'apport des vertebres fossiles continentaux. Bull. Societe Geologique France (7) 23, 6, p. 587-593.
('Elements for a paleobiogeographic history of SE Asia: the contribution of continental vertebrate fossils'. Incl. report of Jurassic fresh-water crocodilian Sunosuchus from NE Thailand, of Laurasian affinity)

Buffetaut, E. (1984)- The palaeobiogeographical significance of the Mesozoic continental vertebrates from South-East Asia. Memoires Societe Geologique France, N.S., 147, p. 37-42.

Bunopas, S. & S. Khositanont (2008)- Did Shan-Thai twice marry Indochina and then India?: a review. Bull. Earth Sciences Thailand (BEST) 1, 1-2, p. 1-27.
(online at: https://ph01.tci-thaijo.org/index.php/bestjournal/article/view/246419/167510)
(Shan-Thai (= Sibumasu) and Indochina microcontinents migrated from W Australia since latest Devonian, to settle in Late Norian. During Late Triassic both microcontinents drifted up latitude and stayed in N Hemisphere. Pre-first continent-continent collision between Shan-Thai and Indochina occurred just under Equator as early as E Triassic. Breakup of Pangea in Late Cretaceous time. At 45 Ma Himalayan extrusion, caused by 2nd continent-continent collision, began and have its paroxysm in M Miocene. Etc.)

Bunopas, S., P. Vella, H. Fontaine, S. Hada, C. Burrett, P. Haines, S. Potisat, T. Wongwanich, P. Chaodumrong, K.T. Howard & S. Khositanont (2001)- Growth of Asia in the Late Triassic continent- continent collision of Shan-Thai and Indochina against South China. Gondwana Research 4, 4, p. 584-585.
(Abstract only. Late Triassic (M-L Norian) continent-continent collision between Shan-Thai (=Sibumasu) and Indochina microcontinents resulted in formation of axial core of SE Asia. Continent-continent collision terminated marine environments between Shan-Thai - Indochina and S China. Lower-Middle Triassic volcanic arc-trench systems developed on E active margin of Shan-Thai W of Pha Som Suture zone from Nan-Uttaradit-Sra Kaeo and Bentong-Raub line. Etc.)

Bunopas, S., P. Vella, H. Fontaine, S. Hada, C. Burrett, P. Haines, S. Potisat, T. Wongwanich, P. Chaodumrong, K.T. Howard & S. Khositanont (2002)- Growing of Asia in the Late Triassic continent- continent collision of Shan-Thai and Indochina against South China. In: N. Mantajit (ed.) Proc. Symposium on Geology of Thailand, Bangkok 2002, Dept. Mineral Resources (DMR), p. 129-135.
(online at: http://library.dmr.go.th/Document/Proceedings-Yearbooks/M_1/2002/6385.pdf)

(Extended version of Bunopas et al. 1991, Gondwana Research (2001). Collision of Sibumasu (Shan-Thai) and Indochina in late Norian terminatedPaleotethys in SE Asia, along suture zone from W Yunnan- Nan-Uttaradit-Sra Kaeo- Yala to Raub-Bentong at 23°N above Equator. Cenozoic CW rotation of Thailand of >30°)

Bunopas, S., P. Vella, H. Fontaine, S. Hada, C. Burrett, P. Haines, S. Potisat, T. Wongwanich, P. Chaodumrong, K.T. Howard & S. Khositanont (2002)- Shan-Thai and Indochina, Lower Paleozoic Gondwana derived paired microcontinents growing Pangea by first continent-continent collision in Late Norian with South China suffered second continent-continent collision of India to Asia. In: Geodynamic processes of Gondwanaland-derived terranes in East and Southeast Asia, their crustal evolution, emplacement and natural resources potential, Phitsanulok 2002, p. 120-133.
(online at: http://library.dmr.go.th/Document/Proceedings-Yearbooks/M_3/2547/9535.pdf)

Buratti, N. & S. Cirilli (2007)- Microfloristic provincialism in the Upper Triassic Circum-Mediterranean area and palaeogeographic implication. Geobios 40, 2, p. 133-142.
(Two U Triassic (Carnian) palynoflora provinces: (1) Onslow of NW Australia (incl. European forms Camerosporites, Aulisporites, Enzonalasporites, Ovalipollis, Samaropollenites, Infernopollenites, Minutosaccus) and (2) Ipswich of S and E Australia. W Timor floras from U Triassic pelagic deposits placed in Onslow microflora. Suggests Onslow microflora assemblages, with minor variations, present from W Tethys to N Australian margin (W Timor))

Burrett, C.F. (1974)- Plate tectonics and the fusion of Asia. Earth Planetary Science Letters 21, p. 181-189.
(Early paper describing amalgamation of Asia. Nine blocks defined. Paleogeographical, paleontological and tectonic evidence suggest Asia did not fuse completely until well into Mesozoic)

Burrett, C., N. Duhig, R. Berry & R. Varne (1991)- Asian and South-western Pacific continental terranes derived from Gondwana, and their biogeographic significance. In: P.Y. Ladiges et al. (eds.) Australian biogeography, Australian Syst. Botany 4, 1, p. 13-24.
(Most small geological terranes in Indo-Pacific region rifted from Gondwana. Shan-Thai terrane rifted from Australia in Permian and collided with Indo-China in Triassic. Parts of Sumatra and Kalimantan may have rifted from Australia in Cretaceous and carried angiosperm flora to North. Other terranes now in SE Asia and Pacific were part of Australian continent at various times in Cenozoic)

Burrett, C., J. Long & B. Stait (1990)- Early-Middle Palaeozoic biogeography of Asian terranes derived from Gondwana. In: W.S. McKerrow & C.R. Scotese (eds.) Palaeozoic palaeogeography and biogeography. Geological Society, London, Memoir 12, p. 163-174.
(Contiguity of Shan-Thai (=Sibumasu) Terrane and NW Australia suggested by faunal affinities in Late Cambrian trilobites, Ordovician molluscs, stromatoporoids, brachiopods and conodonts. Re-evaluation of E Paleozoic paleomagnetism places Shan-Thai against NW Australia. N China Block was next to N Australia/ New Guinea, rifted off in E Devonian or earlier. S China micro-vertebrates and conodonts suggest Shan-Thai still close to Australia in M Devonian)

Burrett, C. & B. Stait (1986)- Southeast Asia as a part of an early Palaeozoic Australian Gondwanaland. In: G.H. Teh & S. Paramananthan (eds.) Proc. 5th Regional Congress Geology Mineral Energy Resources of SE Asia (GEOSEA V), Kuala Lumpur 1984, 1, Bull. Geological Society Malaysia 19, p. 103-107.
(online at: https://gsmpubl.files.wordpress.com/2014/09/bgsm1986009.pdf)
(Provenance of Paleozoic sediments from Thailand and Malaysia and trilobite- mollusc studies suggest Sibumasu block was adjacent to NW Australia in Ordovician. Probable Upper Carboniferous glacial sediments in Thailand and Malaysia, with boulders from cratonic source and detrital diamonds. Early Carboniferous breakup most likely. Collision with Indochina Block in Triassic)

Burrett, C.F. & B. Stait (1986)- Southeast Asia as a part of an Ordovician Gondwanaland- paleogeographic test of a tectonic hypothesis. Earth Planetary Science Letters 75, p. 184-190.
(Upper Cambrian- Ordovician micro- and macrofaunas very close similarities between Thailand-Malaysia Sibumasu Block and NW Australia, suggesting E Paleozoic proximity)

Burrett, C., M. Udchachon & H. Thassanapak (2016)- Palaeozoic correlations and the palaeogeography of the Sibumasu (Shan-Thai) terrane- a brief review. Research and Knowledge 2, 2, p. 1-17.
(online at: https://rk.msu.ac.th/wp-content/uploads/2017/09/01-Clive-Burrett4-compressed.pdf)
(Review of Cambrian-Permian predominantly shelfal marine siliciclastics and carbonates of Sibumasu Terrane in NW Malaysia (Langkawi), S Thailand (Satun), Shan States of Myanmar and Baoshan Block of W Yunnan. Continuous platform sequences in W Sibumasu and deep-water shales and cherts in E Sibumasu, without significant unconformities. Silurian-Devonian faunas mainly peri-Gondwana distributions. Sibumasu part of Australia until E Permian breakup (oriented with Baoshan near Himalayan margin; Sumatra closer to West Papua). Late Triassic (late Norian?) collision with Indochina/Sukhothai Arc terrane)

Burrett, C., M. Udchachon & H. Thassanapak (2021)- The Truong Son, Loei-Phetchabun, and Kontum Terranes in Indochina: provenance, rifting, and collisions. Frontiers in Earth Science 9, 603565, p. 1-24.
(online at: www.frontiersin.org/articles/10.3389/feart.2021.603565/full)
(Indochina terranes docked in earliest Carboniferous (collision Truong Son with Loei-Phetchabun) and in Permian (Kontum). Major carbonate platforms in Givetian-earliest Tournaisian on Truong Son and Visean-M-Permian across Truong Son and Loei-Phetchabun. Ordovician within-plate basalts in Kontum and transition from shallow marine Ordovician to Silurian deep-marine sediments and volcanic arc in Truong Son suggest rifting of both terranes from Gondwana in Late Ordovician. Initial docking of Truong Son with S China in late Silurian- E Devonian; docking of Loei-Phetchabun and Truong Son in late Tournaisian- E Visean)

Burrett, C., K. Zaw, S. Meffre, C.K. Lai, S. Khositanont, P. Chaodumrong, M. Udchachon, S. Ekins & J. Halpin (2014)- The configuration of Greater Gondwana- evidence from LA ICPMS, U-Pb geochronology of detrital zircons from the Palaeozoic and Mesozoic of Southeast Asia and China. Gondwana Research 26, p. 31-51.
(online at: https://www.academia.edu/14933844/The_configuration_of_Greater_Gondwana_Evidence_from_LA_ICPMS_U_Pb_geochronology_of_detrital_zircons_from_the_Palaeozoic_and_Mesozoic_ Etc)
(Detrital zircon ages from Paleozoic-Mesozoic in Malaysia, Thailand, Laos, Vietnam, Cambodia and China, compared to zircon ages from Australia, Asia. Indochina and S China terranes and Tethyan Himalayas close to similar source areas. E Paleozoic paleobiogeographic data suggest N China was close to Gondwana, but not supported here. Similarity between Ordovician Tarutao Fm of Sibumasu and Tumblagooda Sst of W Australia and Tethyan Himalaya. Quartzite and granite clasts in Permian glaciomarine deposits of Sibumasu with age spectra similar to W and N Australia (incl. 1850 Ma Barramundi Orogeny peak). Triassic Lampang and Song Groups of N Thailand detrital zircons suggest Indochina terranes source for basins of Sukhothai Terrane)

Cai, F., L. Ding, A.K. Laskowski, P. Kapp, H. Wang, Q. Xu & L. Zhang (2016)- Late Triassic paleogeographic reconstruction along the Neo-Tethyan Ocean margins, southern Tibet. Earth Planetary Science Letters 435, p. 105-114.
(online at: https://manuscript.elsevier.com/S0012821X15007906/pdf/S0012821X15007906.pdf)
(Petrographic and detrital zircon analyses of U Triassic sandstones from S Lhasa and N margin of India. Tethyan Himalaya Sequence dominated by Indian-affinity Precambrian detrital zircons, but nearby areas with populations of Permian- E Jurassic (291-184 Ma) zircons for which there is no known Indian source, so probably derived from continental crustal fragments that were adjacent to NW margin of Australia. May be part of Late Triassic submarine fan along N Australian shelf, together with age-equivalent beds in W Sulawesi, Timor and W Papua with similar zircon age populations. U Triassic Mailonggang Fm from S side of S Lhasa terrane with Carnian-Norian carbonates-clastics, at that time probably the S margin of Eurasia (SW-directed paleocurrents), dominated by Permian zircons from proximal Lhasa terrane sources; differs from Tethyan Himalaya beds, suggesting separation from Greater India by Neo-Tethys Ocean)

Cai, J.X. & K.J. Zhang (2009)- A new model for the Indochina and South China collision during the Late Permian to the Middle Triassic. Tectonophysics 467, p. 35-43.
(Indochina and South China separated from Gondwana in Silurian. Analysis of E Paleozoic suggests Indochina may be extended to include N Vietnam, part of Qinzhou tectonic zone and S Hainan Island (traditionally regarded as parts of S China). U Paleozoic turbidites and mid-oceanic ridge basalts along new

Dian-Qiong suture illustrate ocean between Indochina and S China consumed by S-directed subduction under Indochina in Late Permian- M Triassic)

Cai, Z.R., J.Y. Xiang, Q.T. Huang, Z.X. Yin, Y.J. Yao, H.L. Liu & B. Xia (2016)- Textural and map contrasts of the subduction-collision boundary between the Philippine Arc and the Sunda margin. Arabian J. Geosciences 9, 4, p. 1-10.
(Review of active subduction-collision boundary between Philippine Arc and Sunda margin, from Taiwan, S along Manila Trench, through thrust fault zone of Mindoro, to Negros Trench at E edge of Sulu Sea, then through thrust fault zone of Zamboanga to Cotabato Trench at E side of Celebes Sea/ Sangihe Arc)

Calais, E., L. Dong, M. Wang, Z. Shen & M. Vergnolle (2006)- Continental deformation in Asia from a combined GPS solution. Geophysical Research Letters 33, L24391, p. 1-6.
(online at: http://onlinelibrary.wiley.com/doi/10.1029/2006GL028433/epdf)
(New model of Asia tectonic plates relative horizontal motions from GPS measurements)

Campbell, H.J. & J.A. Grant-Mackie (2000)- The marine Triassic of Australasian and its interregional correlation. In: H. Yin et al. (eds.) Permian-Triassic evolution of Tethys and Western Circum-Pacific, Developments in palaeontology and stratigraphy 18, Elsevier, p. 235-255.
(Review of stratigraphy/ fauna of marine Triassic outcrops of E Indonesia, New Caledonia, Australia and New Zealand. Including brief summaries of PNG (Yuat River gorge argillites with Anisian ammonites), Misool, Seram, Buru (Norian- Rhaetian Fogi Beds with Misolia), Timor-Roti and SE Sulawesi-Buton (late Norian Monotis subcircularis in Winto beds). No maps, strat columns)

Capitanio, F.A. & A. Replumaz (2015)- Subduction and slab breakoff controls on Asian indentation tectonics and Himalayan western syntaxis formation. Geochem. Geophysics Geosystems 14, 9, p. 3515-3531.
(online at: http://onlinelibrary.wiley.com/doi/10.1002/ggge.20171/pdf)
(On link between large-scale Asian continent deformations and Indian slab subduction and breakoff. Formation of C Asian intracontinental faulting, the Bangong-Red River Fault and Altyn Tagh fault followed successive Indian slab breakoff episodes

Capitanio, F.A., A. Replumaz & N. Riel (2015)- Reconciling subduction dynamics during Tethys closure with large-scale Asian tectonics: Insights from numerical modeling. Geochem. Geophysics Geosystems 16, 3, p. 962-982.
(online at: https://www.researchgate.net/publication/273474332_Reconciling_subduction_dynamics_during_Tethys_closure_with_large-scale_Asian_tectonics_Insights_from_numerical_modeling)

Caputo, M.V. & J.C. Crowell (1985)- Migration of glacial centers across Gondwana during Paleozoic era. Geological Society of America (GSA) Bull. 96, p. 1020-1036.

Carling, P.A., T. Tada, R. Tada, W. Songtham, A.J. Cresswell, D.C.W. Sanderson, N. Porat et al. (2024)- Regionally extensive ejecta layer of the Australasian tektite strewn field: the MIS 20/19 large meteorite impact in mainland South-East Asia. Progress in Earth and Planetary Science 11, 58, p. 1-30.
(online at: https://link.springer.com/content/pdf/10.1186/s40645-024-00660-9.pdf)
(Major review of the M Pleistocene (MIS 20; ~788-785 ka) large meteorite impact in mainland SE Asia, the 'Australasian Tektite Strewn Field' of >300,000 km^2 and its sedimentary impact signature)

CCOP-IOC (1974)- Metallogenesis, hydrocarbons and tectonic patterns in Eastern Asia. Report of the IDOE Workshop on Tectonic Patterns and Metallogenesis in East and Southeast Asia, Bangkok 1973, United Nations ESCAP, Bangkok, CCOP, Technical Publication 2, p. 1-158.
(online at: www.jodc.go.jp/info/ioc_doc/Workshop/015652eo.pdf)
(Overview of SE Asia tectonics and proposals by Katili et al. for SEATAR transect for future work)

Cecca, F. (1999)- Palaeobiogeography of Tethyan ammonites during the Tithonian (latest Jurassic). Palaeogeogr. Palaeoclim. Palaeoecology 147, p. 1-37.

(Focused on Western and Central Tethys; little or nothing on SE Asia/ Australia)

Cesari, S.N. & C.E. Colombi (2013)- A new Late Triasssic phytogeographical scenario in westernmost Gondwana. Nature Communications 4, 1889, p. 1-6.
(online at: www.nature.com/articles/ncomms2917.pdf)
(Floral provincialism in S Hemisphere in Late Triassic characterized by Ipswich and Onslow provinces of E Gondwana here extended to NW Argentina. Previously considered part of Ipswich, but diagnostic Euramerican species in assemblages with Gondwanan taxa allows placing palynofloras in Onslow province)

CGMW/UNESCO (1986)- Metallogenic map of South and East Asia, Sheet 4 (1: 5M scale). Geological Survey of Japan.

Chablais, J., R. Martini, E. Samankassou, T. Onoue & H. Sano (2009)- Microfacies and depositional setting of the Upper Triassic mid-oceanic atoll-type carbonates of the Sambosan accretionary complex (southern Kyushu, Japan). Facies 56, 2, p. 249-278.
(Sambosan U Triassic shallow-water limestones remnant of mid-oceanic atoll on seamount in Panthalassan Ocean, accreted along with deep-water ribbon-cherts rocks to E margin of Asia in Late Jurassic- E Cretaceous. Seventeen microfacies distinguished. Foraminifers (incl. Triasina hantkeni) indicate Late Carnian- Rhaetian age. Tethyan affinity of faunas suggests Sambosan seamount located in low- middle-latitude of S Hemisphere during Late Triassic)

Chaloner, W.G. & G.T. Creber (1988)- Fossil plants as indicators of Late Palaeozoic plate positions. In: M.G. Audley-Charles & A. Hallam (eds.) Gondwana and Tethys, Geological Society, London, Special Publ. 37, p. 201-210.
(On latest Carboniferous and Early Permian floral provinces. In SE Asia juxtaposition of Cathaysian (S China, Thailand, Malay Peninsula, Sumatra) and Gondwanan (India, Australia, New Guinea) floras)

Chaloner, W.G. & W.S. Lacey (1973)- The distribution of Late Palaeozoic floras. In: N.F. Hughes (ed.) Organisms and continents through time, Special Paper Palaeontology 12, p. 271-289.
(online at: www.palass.org/sites/default/files/media/publications/special_papers_in_palaeontology/number_12/spp12_pp271-290.pdf
(33 plant genera can be used to define four main Permian floral provinces)

Chandra, U. (1984)- Tectonic segmentation of the Burmese-Indonesian Arc. Tectonophysics 105, p. 279-290.
(Transverse boundary zones (North Andaman Boundary Zone, Sunda Boundary Zone) separate segments of the active Burma- Indonesia volcanic arc)

Chen, H., S. Sun, J. Li, F. Heller, J. Dobson, M. Haag & K.J. Hsu (1993)- Early Triassic paleomagnetism and tectonics, South China. In: B.K. Tan et al. (eds.) 7th Regional Congress Geology Mineral Energy Resources of SE Asia (GEOSEA VII), Bangkok 1991, J. Southeast Asian Earth Sciences 8, p. 269-276.
(Paleomagnetic data from Lower Triassic limestones in S China support existence of four continental blocks, in E Triassic all scattered in E Paleotethys low latitude, separated by oceans: Yangtze, Xianggui, Cathaysia and Dongnanya (=S China Sea NW margin). Cathaysia block ~90° CW rotation. Permian on Hainan island ~25° CCW rotation)

Chen, X.F., J. Ye, Y. Xiang & X. Chen (2017)- Metallogenic characteristics of the major type deposits in Southeast Asia. Acta Geologica Sinica (English Edition), 91, Suppl. 1, p. 257-258.
(online at: https://onlinelibrary.wiley.com/doi/pdf/10.1111/1755-6724.13283)
(Extended Abstract. Major types of deposits in SE Asia: porphyry type copper (gold-molydenum), orogenic type gold, skarn type copper-gold, epithermal type gold-silver. Other deposits include intrusion-related golds, VHMS, MVT, SEDEX, IOCG, granitoid-related tungsten-tin, REE and potash deposits).

Chen, Y., V. Courtillot, J.P. Cogne, J. Besse, Z. Yang & R. Enkin (1993)- The configuration of Asia prior to the collision of India: Cretaceous paleomagnetic constraints. J. of Geophysical Research 98, B12, p. 21927-21941.

(Paleomagnetic data from C Asia show 1700±610 km of shortening of S Asia since Cretaceous absorbed by distributed deformation between S Tibet and Siberia craton, based on Cretaceous poles from Junggar, Tarim, Tibet, Indochina, S and N China and Mongolia blocks. Remarkable consistency between upper and lower Cretaceous results, suggesting Cretaceous time of little displacement. Paleogeographic reconstruction of Asia in Cretaceous)

Chiu, J.M., B.L. Isacks & R.K. Cardwell (1991)- 3-D configuration of subducted lithosphere in the western Pacific. Geophysical J. International 106, p. 99-111.
(online at: https://academic.oup.com/gji/article/106/1/99/740584)
(Interesting 3-D displays of subducting slabs in W Pacific region (incl. Indonesia) (Benioff-Wadati zones of deep earthquake hypocenter distributions. Depth of deepest earthquakes decreases in W direction along Sunda Arc)

Choong, C.M., M. Pubellier, B. Sautter & H.T. Gebretsadik (2022)- Records of the oceanic propagator closure at the southern splay of the Palaeo-Tethys. Geological Journal 57, 9, p. 3881-3915.
(Paleozoic- E Mesozoic Palaeo-Tethys ocean diverged into several splays throughout E and SE Asia. Remnants of Paleotethys oceanic crust and deep-sea sediments from Himalayas in N, across S China (Yunnan), Thailand, Peninsular Malaysia to Bangka and Belitung islands in S. Paleotethys suture in Riau Archipelago, Indonesia, extensively eroded: Bangka and Belitung islands show only minor serpentine and pillow basalts along line that curves towards Borneo. Syn- and post-collisional granitic bodies that form large batholiths in Thailand and Malaysia relatively small in Indonesia, particularly on Belitung, suggesting lack of large underplating of Sibumasu crust in region. Observations suggest S-ward opening of propagating oceanic basin from Devonian to Carboniferous, which began to close from Permian to Triassic period (and closed in Triassic))

Chumakov, N.M. & M.A. Zharkov (2002)- Climate during Permian- Triassic biosphere reorganizations, 1: Climate of the Early Permian. Stratigraphy and Geological Correlation 10, 6, p. 586-602.

Chumakov, N.M. & M.A. Zharkov (2003)- Climate during Permian- Triassic biosphere reorganizations, 2. Climate of the Late Permian and Early Triassic: general inferences. Stratigraphy and Geological Correlation 11, 4, p. 361-375.

Claude, J. (2017)- The continental fossil record and the history of biodiversity in Southeast Asia. In: S. Morand et al. (eds.) Biodiversity conservation in Southeast Asia- Challenges in a changing environment, Chapter 2, p. 1-13.
(Brief review of land plant assemblages in SE Asia, from Late Paleozoic until now)

Claude, J., H. Tong, A. van der Geer, P.O. Antoine, M. Reyes, J. de Vos & T.Ingicco (2024)- The origin of the Malesian fossil turtle diversity: Fossil versus molecular data. Annales de Paleontologie 110, 102665, p. 1-15.
(online at: https://repository.naturalis.nl/pub/801161/Claude-2024-The-origin-of-the-Malesian-fossil-turtle-diversity-A.pdf)
(Four families of turtles/ tortoises in insular SE Asia, mainly of Quaternary age (also undescribed Eocene carettochelyids in W Sumatra), and several endemic species: E Pleistocene fossil record dominated by giant tortoises (S Sulawesi; Geochelone atlas, Java (Bumiaya, Sangiran), Flores), M Pleistocene (Trinil, Timor, etc.) with first of extant taxa in area. Late Pleistocene cave faunas. Most faunas stronger relationships with Indochina than with E Asia, suggesting colonisation followed Siva- or Sino-Malayan routes onto Sunda Shelf and dispersed further E during periods of low sea-level. Box turtle `Cuora amboinensis' arrived in Philippines before early M Pleistocene. Duboisemys isoclina is endemic extinct genus. Etc.)

Cloetingh, S. & R. Wortel (1986)- Stress in the Indo-Australian plate. Tectonophysics 132, p. 49-67.
(Modeling of state of stress in Indo-Australian plate. Regional stress field along Sunda arc varies from compression seaward of and parallel to Sumatra trench to tension perpendicular to Java-Flores segment)

Cobbing, E.J., D.I.J. Mallick, P.E.J. Pitfield & L.H. Teoh (1986)- The granites of the Southeast Asian tin belt. J. Geological Society, London, 143, p. 537-550.

(Four granite provinces, each with its own pattern of cassiterite mineralization: (1) Main Range Province (Triassic), 2. Eastern Province, 3. Western (Peninsular Thailand-Burma) Province, 4. North Thailand Migmatitic Province. Peninsular Malaysia granites from Main Range and E Provinces two contrasted suites which correspond to I and S-types)

Cobbing, E.J. & P.E.J. Pitfield (1986)- South-East Asia granite project- Field report for Thailand 1985. British Geological Survey (BGS) Overseas Division, Report MP/86/16/R, p. 1-213.
(online at: http://library.dmr.go.th/Document/DMR_Technical_Reports/1985/1633.pdf)

Cobbing, E.J., P.E.J. Pitfield, D.P.F. Darbyshire & D.I.J. Mallick (1992)- The granites of the South-East Asian tin belt. British Geological Survey (BGS), Overseas Memoir 10, p. 1-369.
(online at:https://pubs.bgs.ac.uk/publications.html?pubID=B04056)
(Extensive study of granites in Malaysia, Indonesia, Thailand and Myanmar. Not all granites have age-equivalent volcanics. Distinct belt. In Malaysian segment Permo-Triassic- lower Jurassic Eastern Belt with tin deposits (incl. Bangka- Belitung calk-alkaline I-types in Indonesia) (mainly cassiterite-magnite skarns), while neighboring Central Belt more gold-bearing. Western Province Cretaceous granites with tin in S-type granites only. Rb-Sr ages for Bangka granites mainly ~220 Ma (213-229 Ma (Norian); in line with Priem and Bon (1982)). Some age results of 200 Ma, 251-252 Ma; Barber et al. 2005)

Cocks, L.R.M. & R.A. Fortey (1988)- Lower Palaeozoic facies and faunas around Gondwana. In: M.G. Audley-Charles & A. Hallam (eds.) Gondwana and Tethys, Geological Society, London, Special Publ. 37, p. 183-200.
(Ordovician and Silurian paleogeographic maps, some with W Papua data control points)

Cocks, L.R.M. & T.H. Torsvik (2013)- The dynamic evolution of the Palaeozoic geography of eastern Asia. Earth-Science Reviews 117, p. 40-79.
(Paleogeographical reconstructions for 11 intervals from M Cambrian- end Permian through E Asia region, centered on continental blocks of N China, S China and Annamia (Indochina). Annamia and S China left Gondwana margin area together during Lower Devonian opening of Paleotethys Ocean, but shortly afterwards they separated into two, not to reunite until Triassic. Cambrian- Permian rocks in Japan largely represent active volcanic arcs which originally lay to SE of S China. Neotethys Ocean opened in M Permian, dividing Sibumasu and Tibetan terranes from Gondwana, and Paleotethys Ocean started to close)

Copley, A., J.P. Avouac & J.Y. Royer (2010)- India-Asia collision and the Cenozoic slowdown of the Indian plate: Implications for the forces driving plate motions. J. of Geophysical Research: Solid Earth 115, 3, B03410, p. 1-14.
(Plate motion of India changed dramatically between 50-35 Ma, with convergence between India and Asia dropping from 15 to 4 cm/yr, coincident with onset of India-Asia collision. Apparent relationship between plates velocities and length of subduction zones along boundaries, probably reflecting importance of slab pull as driving mechanism)

Copper, P. & C.R. Scotese (2003)- Megareefs in Middle Devonian supergreenhouse climates. Geological Society of America (GSA), Special Paper 370, p. 209-230.
(>7 Mid-Devonian 'Great Barrier Reefs', including S. China plate (Vietnam-Hunan, ~1700 km), E Australia-New Guinea (spottily preserved isolated platforms; ~2000 km) and Canning Basin (~400 km))

Crame, J.A. (1986)- Late Mesozoic bipolar bivalve faunas. Geological Magazine 123, 6, p. 611-618.
(Bipolar bivalve genera probably existed through greater part of late Jurassic- Cretaceous, probably controlled by global climatic zonation. Examples of 'anti-tropical genera: Buchia s.l. and inoceramids (Retroceramus) in latest Jurassic, Aucellina in E Cretaceous, etc.)

Crowell, J.C. (1995)- The ending of the Late Paleozoic ice age during the Permian period. In: P.A. Scholle et al. (eds.) The Permian of Northern Pangea, Springer, Berlin, 1, p. 62-74.

Crowell, J.C. (1999)- Pre-Mesozoic ice ages: their bearing on understanding the climate system. Geological Society of America (GSA) Memoir 192, p. 1-106.
(Cenozoic Ice Age from ~43 Ma-Recent, preceded by warmer interval of ~70 My back into mid-Cretaceous time. Next older Mesozoic icy intervals are E Cretaceous (~105-140 Ma) and Jurassic (~160-175 Ma and ~188-195 Ma). Late Paleozoic Ice Ages waxed and waned between ~256-338 Ma. Iciness expanded during Late Devonian-E Carboniferous (353- 363 Ma). Ordovician-Silurian strong and short ice age between ~429-445 Ma. During Late Proterozoic-Cambrian, three or four ice ages (~520–950 Ma). At some localities glaciation occurred at low latitudes)

Cuneo, N.R. (1996)- Permian phytogeography in Gondwana. Palaeogeogr. Palaeoclim. Palaeoecology 125, p. 75-104.
(Review of Gondwanan phytogeogeographic units for five Permian time slices. Nothing on SE Asia)

Dagys, A.S. (1993)- Geographic differentiation of Triassic brachiopods. Palaeogeogr. Palaeoclim. Palaeoecology 100, p. 79-87.
(Maximum paleobiogeographic differention of Triassic brachiopods in Late Triassic, with at least five biochores: Boreal, N Tethyan, peri-Gondwanian, Notal or Maorian and E Pacific. E part of peri-Gondwana Tethys with Misolia, Timorhynchia)

Damborenea, S.E. (2002)- Jurassic evolution of Southern Hemisphere marine palaeobiogeographic units based on benthonic bivalves. Geobios 35, Suppl. 1, p. 51-71.
(Latest Triassic- earliest Cretaceous distribution of bivalves in S Hemisphere. Tethyan Realm with Australian unit restricted to Late Triassic. Late Jurassic Maorian Province extends to Antarctic and W Pacific localities incl. Timor, Sula, Buru, Seram, but overall endemism diminishes from Oxfordian to Tithonian-Berriasian. Oxfordian-Kimmeridgian Malayomaorica has Austral distribution, reaching Australia-New Guinea. Austral Province of Indo-Pacific Region (South Temperate) strongly developed at beginning of Cretaceous, incl. Australia, New Zealand, New Guinea)

Damborenea, S.E., J. Echevarría & S. Ros-Franch (2013)- Southern Hemisphere palaeobiogeography of Triassic-Jurassic marine bivalves. Springer Briefs in Earth System Sciences, p. 1-139.
(online at: https://www.researchgate.net/publication/285408112_Southern_Hemisphere_Palaeobiogeography_of_Triassic-Jurassic_Marine_Bivalves_Chapter_1_Introduction)

Darbyshire, D.P.F. (1987)- Rb/Sr and Sm/Nd isotope studies of granites of Southeast Asia. Warta Geologi 13, p. 117-120.
(online at: https://gsmpubl.files.wordpress.com/2014/09/ngsm1987003.pdf)
(Summary of British Geological Survey program of radiometric dating of SE Asia granites (see also Cobbing et al. 1992))

Delescluse, M. & N. Chamot-Rooke (2007)- Instantaneous deformation and kinematics of the India-Australia Plate. Geophysical J. International 168, 2, p. 818-842.
(Present-day deformation distributed around Afanasy Nikitin Chain in Central Indian Basin (CIB; shortening) and within Wharton Basin (WB; strike-slip). N portion of NinetyEast ridge (NyR) major discontinuity for strain and velocity. Taking into account intraplate velocity field in vicinity of Sumatra trench, we obtain convergence rate of 46 mm/ yr towards N18°E at epicenter of 2004 Aceh mega-earthquake. Predicted shortening in CIB and WB and extension near Chagos-Laccadive in agreement with deformation measured from plate reconstructions and seismic lines, suggesting continuum of deformation since onset of intraplate deformation around 7.5-8 Ma)

Dercourt, J., L.E. Ricou & B. Vrielynck (eds.) (1993)- Atlas Tethys, Palaeoenvironmental maps. Gauthier-Villars, Paris, p. 1-307.
(Fourteen plate reconstructions and paleogeography maps of Tethys Oceans from mid-Permian-Tortonian. Maps do not include much of SE Asia)

De Wever, P. & F. Baudin (1996)- Palaeogeography of radiolarites and organic-rich deposits in Mesozoic Tethys. Geologische Rundschau 85, 2, p. 310-326.
(Siliceous and marine organic-rich deposits both result of high planktonic productivity, but sometimes associated, sometimes separate in space and time. Siliceous marine phtanite family facies contains organic material and are blackish (vs red/green for radiolarite facies) and deposited generally in shallower environments. Paleogeographic analysis for three Mesozoic high sea-level intervals (Toarcian, Kimmeridgian and Cenomanian) show: (a) in Jurassic siliceous deposits closer to open ocean waters than organic-rich ones; (b) during Cretaceous times often associated)

De Wever, P., F. Baudin, J. Azema & E. Fourcade (1995)- Radiolarians and Tethyan radiolarites from primary production to their paleogeography. In: J. Dercourt & A.E.M. Nairn (eds.) The ocean basins and margins 8, The Tethys Ocean, Plenum Press, p. 267-318.

Dewey, J.F., S. Cande, S. & W.C.I. Pitman (1989)- Tectonic evolution of the India/ Eurasia collision zone. Eclogae Geologicae Helvetiae 82, p. 717-734.
(online at: http://dx.doi.org/10.5169/seals-166399)
(Since collision of India with Eurasia at ~45 Ma in M Eocene, N-S intracontinental convergence continued at ~5 cm/ year. Convergence was accommodated principally by lithospheric thickening in widening zone between E transpressive sinistral megashear from Makran- Baikal and W dextral megashear from Sumatra to Tanlu Fault System. Lateral extrusion or escape was not a major factor in accommodating India/Eurasia convergence)

Dickins, J.M. (1985)- Late Palaeozoic glaciation. BMR J. Australian Geology Geophysics 9, p. 163-169.
(online at: www.ga.gov.au/metadata-gateway/metadata/record/81179/)
(Review of Carboniferous- Permian glaciation in Australia- SE Asia. Main widespread terrestrial glaciation across Gondwana in Asselian (earliest Permian). In all areas rel. warm conditions returned in Sakmarian)

Dickins, J.M. (1985)- Palaeobiofacies and palaeobiogeography of Gondwanaland from Permian to Triassic. In: K. Nakawara & J.M. Dickins (eds.) The Tethys, Tokai University Press, Tokyo, p. 83-92.

Dickins, J.M. (1992)- Permian geology of Gondwana countries: an overview. International Geology Review 34, p. 986-1000.
(Earliest Permian of most Gondwanan areas characterized by glacial deposits and cold-water marine faunas. In W Australia glaciation confined to Asselian, followed by amelioration and rise in sea level in Sakmarian)

Dickins, J.M. (1996)- Problems of a Late Palaeozoic glaciation in Australia and subsequent climate in the Permian. Palaeogeogr. Palaeoclim. Palaeoecology 125, p. 185-197.
(Two main periods of glaciation: (1) Namurian (E Carboniferous) possibly extending into beginning of Late Carboniferous; (2) Asselian (earliest Permian). End of glaciation asssociated with worldwide eustatic rise in sea-level in basal Sakmarian (after this no good evidence for glaciation in Australia). In some places in Australia subtropical or tropical conditions in U Sakmarian, U Artinskian, Kungurian, Kazanian and Dzhulfian, all separated probably by colder periods. Marine Carboniferous Levipustula fauna may represent less cold sea water than E Permian Eurydesma fauna)

Dickins, J.M. (2000)- The northern margin of Gondwanaland: uppermost Carboniferous to lowermost Jurassic and its correlation. In: H.F. Yin, J.M. Dickins et al. (eds.) Permian-Triassic evolution of Tethys and Western Circum-Pacific, Developments in Palaeontology Stratigraphy 18, Elsevier, p. 257-270.
(In latest Carboniferous- early E Permian no apparent continuous sea in Tethys sensu Suess. Earliest Permian land barrier separated C Asian Sea from southern sea connecting 'Gondwana' countries. Youngest recognized marine deposits connecting through warm water C Asian Sea not younger than E Permian (Sakmarian). In U Permian-Triassic a N shore of Gondwanaland can be traced with southern sediment source. N shore of Tethys largely remains to be delineated)

Dickins, J.M. & Phan Cu Tien (1997)- Indosinian tectogeny in the geological correlation of Vietnam and adjacent regions. In: J.M. Dickins et al. (eds.) Late Palaeozoic and Early Mesozoic Circum-Pacific events and their global correlation. Cambridge University Press, p. 87-96.
(Review of U Devonian- Triassic stratigraphy of Vietnam. Indosinian orogeny manifested by Dzhulfian (U Permian) widespread unconformity and volcanic activity. Second Indosinian orogenic phase at end-Carnian, with widespread intrusive activity and deposition of coal-bearing molasse)

Dickins, J.M., Y. Zunyi, Yin Hongfu et al. (eds.) (1997)- Late Palaeozoic and Early Mesozoic Circum-Pacific events and their global correlation. Cambridge University Press, p. 1-255.
(Mainly mainland E Asia papers; nothing on Indonesia)

Diener, C. (1916)- Die marinen Reiche der Triasperiode. Denkschriften Kaiserliche Akademie Wissenschaften, Wien, Mathematisch-Physikalische Klasse, 92, p. 405-549.
(online at: https://opac.geologie.ac.at/ais312/dokumente/Diener_1915_Triasperiode.pdf)
('The marine realms of the Triassic period'. Review of global Triassic macrofaunas as known in 1916. Four main faunal provinces (Boreal, Mediterranean, Himalayan and Andean), based on cephalopods, bivalves, etc. The Indonesian area groups in Himalayan Domain. Brief reviews of Triassic on Timor, Roti, Savu, Sumatra, Seram, Buru. Only Timor has complete Triassic section, with cephalopods and corals very similar to Alps. In other areas Triassic starts with Carnian transgression. Triassic of Sumatra mainly shallow marine clastics)

Ding, W.W., X. Huang, Liang Zhao, J. Wu, C.B. Dimalanta, M. Pubellier & F. Wang (2024)- Dynamic processes of the Southeast (SE) Asia convergent system and its impact on continental deformation and marginal basin formation: Preface. Tectonophysics 878, 230314, p.
(SE Asia at convergent region between Eurasian, Philippine Sea and Indo-Australian plates. Interplay of these plates resulting subduction zones, volcanic arcs, marginal basins, and continental deformation (Introduction to Special Issue of Tectonophysics)

Ding, W.W., R.X. Zhu, B. Wan, L. Zhao, L., X.W. Niu, P. Zhao, B. Sun & Y.Zhao (2023)- Geodynamic processes of the southeastern Neo-Tethys Ocean and the formation mechanism of the curved subduction system in Southeast Asia. Science China Earth Sciences 66, p. 703-717. (also Erratum, vol. 67, 3, p. 894)
(SE Asia at intersection of Tethys and Pacific domains, resulting in complicated deep structure, surface magma responses, and dynamic processes of SE Asia. P-wave velocity structure shows remnant of Neo-Tethys subducted slab in lower mantle beneath SE Asia at ~1500 km. Java- E Timor subduction zone: remnant slab is coupled with Indo-Australian subducting slab in upper mantle, while on Sumatra subduction zone, remnant slab is decoupled from Indo-Australian subducting slab. Curved subduction system in SE Asia resulted from N-ward subductions of Neo-Tethys and current Indo-Australian Plate, and W-ward subduction of Pacific Plate since Mesozoic. Etc.)

Domeier, M. (2018)- Early Paleozoic tectonics of Asia: towards a full-plate model. Geoscience Frontiers (Beijing) 9, 3, p. 789-862.
(online at: https://www.sciencedirect.com/science/article/pii/S1674987117302074)
(Extensive review of Cambrian- Silurian plate tectonics of Asia. Not much on SE Asia- Indonesian region)

Domeier, M. & T.H. Torsvik (2014)- Plate tectonics in the late Paleozoic. Geoscience Frontiers (Beijing), 5, p. 303-350.
(online/open access at: www.sciencedirect.com/science/article/pii/S1674987114000061)

Doyle, P. (1992)- A review of the biogeography of Cretaceous belemnites. Palaeogeogr. Palaeoclim. Palaeoecology 92, p. 207-216.
(Belemnites display Boreal and Tethyan marine faunal realms from Early Jurassic- earliest Cretaceous. Austral marine realm was lacking. In late Barremian- early Aptian Austral Realm was initiated with first Gondwanan family, Dimitobelidae. Tethyan belemnite realm cannot be recognised after Cenomanian)

Doyle, P. & P. Howlett (1989)- Gondwana Antarctic belemnite biogeography and the break-up of Gondwana. In: J.A. Crame (ed.) Origins and evolution of Antarctic biota, Geological Society, London, Special Publ. 47, p. 167-182.
(In Late Jurassic, belemnite genera Hibolithes and Belemnopsis abundant and widespread in Tethys, characterizing Tethyan Realm from S Europe and Asia to Antarctica. Distinct S Hemisphere 'Austral' belemnite realm was absent, although some endemicity exists at species level. Late Jurassic Indo-Pacific belemnites dominated by Belemnopsis with Hibolithes as minor element of fauna)

Earnest, A., T.C. Sunilkumar & K. Silpa (2021)- Sinking slab stress and seismo-tectonics of the Indo-Burmese arc: a reappraisal. Tectonics 40, e2021TC006827, p. 1-15.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/pdf/10.1029/2021TC006827)

Ehiro, M. (1996)- Permian and Triassic paleogeography based on ammonoid fossils of East Asia. Chikyu Monthly, 18, p. 724-729. *(in Japanese)*

Ehiro, M. (1997)- Ammonoid palaeobiogeography of the South Kitakami palaeoland and palaeogeography of eastern Asia in Permian to Triassic time. Proc. 30th International Geological Congress, Beijing 1996, 12, Palaeontology and historical geology, VSP, Utrecht, p. 18-28.
(Biogeographic analysis of Permian- Triassic ammonoids in E Asia suggests Kikatami Terrane in NE Japan, was in equatorial realm near S China/ Khanka Terranes. Four ammonoid provinces in Permian: (1) Boreal, (2) Equatorial American, (3) Equatorial Tethyan (incl. S China, SE Asia, Iran, Timor; with E Permian perrinitids, M Permian Timorites, Waagenoceras?) and (4) Peri-Gondwanan (incl. Australia, Himalayas, Salt Range))

Ehiro, M. (1998)- Permian ammonoid fauna of the Kitakami Massif, Northeast Japan- biostratigraphy and Paleobiogeography. In:Y. Jin et al. (eds.) Permian stratigraphy, environments and resources 2, Palaeoworld 9, p. 113-122.
(online at: http://english.nigpas.cas.cn/sp/Palaeoworldbackup/vol9/201103/P020110302550822076467.pdf))
(Similar to above. Late M Permian Timorites- Waagenoceras ammonites of 'allochthonous Timor' affiliated with Tethyan instead of peri-Gondwanan assemblages)

Enay, R. & E. Cariou (1996)- Identification du Kimmeridgien du domaine Indo-Sud-Ouest Pacifique: la faune a *Paraboliceras* (Ammonitina) de l'Himalaya a la Nouvelle-Zelande. Comptes Rendus Academie Sciences, Paris, ser. 2, 322, 6, p. 469-474.
('Recognition of the Kimmeridgian Stage in the Indo-SW Pacific: the Paraboliceras fauna from the Himalayas to New-Zealand'. Kimmeridgian Stage not easily recognizable in Indo-SW Pacific because of lack of European taxa. Faunal sequence of Spiti Shales in C Nepal shows faunas with Paraboliceras (previously thought be of Tithonian age) are diagnostic of Kimmeridgian. This endemic Kimmeridgian biogeographic association extends from Himalayas to New Zealand.)

Enay, R. & E. Cariou (1997)- Ammonite faunas and palaeobiogeography of the Himalayan belt during the Jurassic: initiation of a Late Jurassic austral ammonite fauna. Palaeogeogr. Palaeoclim. Palaeoecology 134, 1, p. 1-38.
(Jurassic ammonite faunas form basis for new biogeographical interpretation of U Bathonian- Tithonian/ Berriasian peri-Gondwanan faunas. Low diversity Austral ammonite fauna around E and S Gondwanaland, from Himalaya to Patagonia)

Enay, R. & E. Cariou (1999)- Jurassic ammonite faunas from Nepal and their bearing on the palaeobiogeography of the Himalayan belt. J. Asian Earth Sciences 17, 5-6, p. 829-848.
(M-L Jurassic Himalayan ammonite faunas rel. low diversity and dominance of indigenous genera. Faunas extending from Himalayas to Antarctica represent an actual biogeographical unit: Indo Pacific Realm. With Blanfordiceras wallichi in Tithonian)

Enkin, R.J., Z. Yang, Y. Chen & V. Courtillot (1992)- Palaeomagnetic constraints on the geodynamic history of the major blocks of China from the Permian to the present. J. of Geophysical Research 97, p. 13953-13989.

(Review of paleomagnetic data of China region suggests major blocks probably in contact in Permian-Triassic, but Jurassic key age for present configuration. During Cretaceous, Chinese poles agree with poles from other continents transferred onto Eurasia. Much of China affected by small (<20°) rotations, interpreted as deformation caused by extrusion away from India collision)

ESCAP (1990)- Triassic biostratigraphy and paleogeography of Asia. ESCAP Atlas of Stratigraphy IX, Mineral Resources Development Series 59, United Nations, New York, p. 1-92.
(online at: https://www.unescap.org/kp/1990/stratigraphic-correlation-between-sedimentary-basins-escap-region-vol-xv-escap-atlas)
(Brief descriptions of Triassic across Asia, incl. Malaysia and Timor)

Fang, Z.J. (1991)- Sibumasu biotic province and its position in Paleotethys. Acta Palaeontologica Sinica 30, 4, p. 344-349.
(Sibumasu province characterized by: (1) No reliable Gondwana cold-water biota or glacial deposits (interpreted glaciomarine pebble-bearing layers are debris flows; molluscs identified as Eurydesma are Schiziodus). Temperate and warm water fauna dominant; carbonates not common; (2) No tropical Cathaysian biotas and reef complexes. Absence of Late Paleozoic coal seams and occurrence of mixed Permian Cathaysian-Gondwana flora in W Yunnan suggest Sibumasu between equatorial coal swamp zone (Cathaysian flora) and S temperate coal swamp zone (Glossopteris flora); (3) Contains Peri-Gondwana and Cathaysian elements but also European, Ural and Boreal elements; (4) Common endemic genera and species)

Fang, Z.J. (1994)- Biogeographic constraints on the rift-drift accretion history of the Sibumasu block. J. Southeast Asian Earth Sciences 9, 4, p. 375-385.
(online at: https://www.researchgate.net/publication/285649456_Sibumasu_biotic_province_and_its_position_in_Paleotethys)
(Paleozoic biogeographic history of Sibumasu block stages: (1) Cambrian-Ordovician with Australian faunal affinities; (2) Silurian-Devonian with Rhenish-Bohemian faunal affinities; (3) Carboniferous- Permian independent biotic province, different from both peri-Gondwanaland (no true E Permian glacial deposits) and Cathaysian biotas (no Permian coals) in Tethyan realm. Towards end Permian, Cathaysian elements more important, especially in E margin, indicating Cathaysian and Sibumasu biotas began to merge. Sibumasu rifted from Gondwanaland in M Ordovician or earlier(Should be Pewrmian?; JTvG) and sutured to East Continent in Late Permian and E Triassic)

Fedorov, P.I. & A.V. Koloskov (2005)- Cenozoic volcanism of Southeast Asia. Petrology 13, 4, p. 352-380.
(Three main periods of activity in Cenozoic volcanic complexes of SE China, Vietnam, Thailand and S China Sea: E Tertiary, Miocene and Pliocene-Quaternary. First period characterized by potassic basalt (Vietnam) and tholeiitic bimodal (SE China) volcanism. Subsequent periods dominated by intraplate-type tholeiitic and alkaline volcanism and minor bimodal tholeiitic magmatism (basalts and rhyolites of Okinawa Trough))

Fernandez, V., J. Claude, G. Escarguel, E. Buffetaut & V. Suteethorn (2009)- Biogeographical affinities of Jurassic and Cretaceous continental vertebrate assemblages from SE Asia. In: E. Buffetaut (ed.) Late Palaeozoic and Mesozoic continental ecosystems in SE Asia, Geological Society, London. Special Publ. 315, p. 285-300.
(Late Jurassic- Early Cretaceous vertebrate assemblages from Khorat Gp of Thailand strong provincialism)

Ferrari, O.M., C. Hochard & G.M. Stampfli (2008)- An alternative plate tectonic model for the Palaeozoic-Early Mesozoic Palaeotethyan evolution of Southeast Asia (Northern Thailand-Burma). Tectonophysics 451, p. 346-365.
(Alternative model for Cambrian- Triassic geodynamic evolution of SE Asia. Differs in Paleotethys suture location in Thailand at Mae Yuam fault. Closure of E Paleotethys related to S-ward oceanic subduction that triggered E Neotethys opening as back-arc, due to Late Carboniferous- E Permian arc magmatism in Mergui (Burma) and Lhasa block (S Tibet) and absence of arc magmatism E of suture. To explain Carboniferous-E Permian and Permo-Triassic arcs in Cambodia, U Triassic magmatism in E Vietnam and L-M Permian arc volcanics in W Sumatra, we introduce Orang Laut terranes, which detached from Indochina and S China

during back-arc opening due to W-ward subduction of Paleopacific. This also explains location of Cathaysian W Sumatra block W of Cimmerian Sibumasu block (see also comments by Metcalfe 2009))

Fielding, C.R., T.D. Frank & J.L. Isbell (2008)- The late Paleozoic ice age- a review of current understanding and synthesis of global climate patterns. Geological Society of America (GSA), Special Paper 441, p. 343-354.
(Late Paleozoic ice age was series of 1-8 My duration discrete glacial events separated by periods of warmer climate. After smaller precursor events massive expansion of ice at Carboniferous-Permian boundary, and glaciation became bipolar. Ice sheets at maximum in Asselian- E Sakmarian, after which they decayed rapidly over much of Gondwana. Minor glaciations continued in Australia and Siberia through late E- M Permian)

Flower, M., R.M. Russo, K. Tamaki & N. Hoang (1998)- Mantle contamination and the Izu-Bonin-Mariana (IBM) 'high-tide mark': evidence for mantle extrusion caused by the Tethyan closure. Tectonophysics 333, p. 9-34.
(Discussion of SE Asia- W Pacific tectonics and plate kinematics. W Pacific back-arc basins opened in 3 main episodes of arc-trench rollback: (1) Eocene W Philippine Sea and Celebes Sea, (2) Oligocene-Miocene Japan, South China, Sulu and Makassar Seas, and (3) Late Miocene- Quaternary Okinawa, Mariana Troughs and Andaman Sea. Extrusion of Tethyan astenosphere, contaminated by sub-Asian cratonic lithosphere, was major cause of W Pacific arc rollback and basin opening)

Flower, M., K. Tamaki & N. Hoang (1998)- Mantle extrusion: a model for dispersed volcanism and DUPAL-like asthenosphere in East Asia and the Western Pacific. In: M.F.J. Flower et al. (eds.) Mantle dynamics and plate interactions in East Asia, American Geophysical Union (AGU), Geodynamics Series 27, p. 67-88.
(On dispersed volcanic clusters over much of Asia and W Pacific following India-Asia and Australia-Indonesia collisions: (1) variably potassic tholeiites and alkali basalts in tension gashes, pull-apart basins, etc., and (2) shoshonite series (K-rich boninite) at extensional, near-collision shear zones and sundered arcs)

Fluteau, F., J. Besse, J. Broutin & M. Berthelin (2001)- Extension of Cathaysian flora during the Permian-climatic and paleogeographic constraints. Earth Planetary Science Letters 193, 3, p. 603-616.
(Mixed Gondwanan, Euramerian and Cathaysian floral elements in 'Mid' Permian Gharif Fm of Oman (see also Berthelin et al. 2003))

Fontaine, H. (1981)- Pre-Tertiary hydrocarbon potential of the South China Sea. Proc. 17th Session Committee Co-ord. Joint Prospecting Mineral Resources in Asian Offshore Areas (CCOP), Bangkok 1980, Paper 15, p. 304-321.
(online at: https://repository.unescap.org/items/7e5623b0-bcfc-4f92-96d3-0d07128db168)
(Brief review of Paleozoic-Mesozoic geology of areas surrounding the S China Sea (not in SCS area itself), incl. mainland SE Asia, Nand W Sumatra, Borneo and Mindoro in the Philippines. To NW and SE of S China Sea oil-gas shows and potential have been noted in pre-Tertiary sections. Interesting otherwise unpublished record of Blanfordiceras cf. wallichi ammonite fragment from C Sulawesi (loc. 11 on Fig. 15= Tithonian age, Gondwanan Tethys margin, presumably part of Banggai-Sula plate stratigraphy; JTvG))

Fontaine, H. (1986)- Shan-Thai Block and Indochina Block during the Carboniferous and the Permian; palaeontological and stratigraphical data. Proc. First Conference on Geology of Indochina, Ho Chi Minh City 1986, General Department of Geology of Vietnam, 1, p. 101-103.

Fontaine, H. (1986)- The Permian of Southeast Asia. United Nations ESCAP, Committee Co-ord. Joint Prospecting Mineral Resources in Asian Offshore Areas, CCOP, Technical Bulletin 18, p. 1-111.
(online at: https://repository.unescap.org/items/312125a5-1653-453e-97d7-3adb1899913d)
(Extensive review of geology and paleontology of Permian of Thailand, Vietnam, Laos, Malaysia, Sumatra, etc. Followed by 7 appendices on Permian fauna-flora by H. Fontaine, Nguyen Duc Tien (foraminifera), D. Vachard and C. Vozenin-Serra (fossil wood)))

Fontaine, H. (2002)- Permian of Southeast Asia: an overview. J. Asian Earth Sciences 20, 6, p. 567-588.

(Permian rocks widespread in SE Asia. Many limestones with fusulinaceans recognized as Permian, but ones without fusulinaceans and previously assigned to Permian, found to be Triassic. Widespread massive limestones represent extensive carbonate platforms. Local occurrences of thick-bedded cherts indicate deep marine environments. Pebbly mudstones in Myanmar, Thailand, NW Malaysia and Sumatra formed in glacial environment. Volcanic rocks absent in NW Peninsular Malaysia and Thailand, but widespread in N Vietnam, Sumatra, E Malay Peninsula and Timor. Faunal and floral assemblages used to establish climatic conditions, environments of deposition and to define crustal blocks and Permian paleogeography)

Fontaine, H., P. David, R. Pardede, N. Suwarna, J.P. Bassoullet, L. Beauvais, E. Buffetaut & R. Ingavat (1983)- The Jurassic in Southeast Asia (Thailand, Laos, Cambodia, Viet Nam, Malay Peninsula, Sumatra, Borneo, West Philippines). CCOP, Technical Bulletin 16, p. 1-75.
(online at: https://repository.unescap.org/items/72341977-4dbb-441d-962f-088707385870)
(Extensive review of Jurassic in SE Asia. Jurassic in Cambodia, Laos, Vietnam, E Thailand and Malay Peninsula mainly in continental facies, with occasional thin, shallow marine interbeds. Busuanga, Linapacan and Ili islands, NE of Palawan, Philippines, 200m thick Late Jurassic limestone with Cladocoropsis, Pseudocyclammina lituus, Salingoporella spp., Thaumatoporella, etc. (Fontaine et al. 1983, Bassoulet 1983). Late Jurassic- E Cretaceous limestones with Cladocoropsis- Pseudocyclammina at many localities across W Sumatra (NW Sumatra, Jambi, S Sumatra; all tied to 'Woyla Terranes'?; JTvG), U Jurassic Bau Limestone in W Sarawak, etc.)

Fontaine, H., C. Chonglakmani, I. Amnan & S. Piyasin (1994)- A well-defined Permian biogeographic unit: Peninsular Thailand and northwest Peninsula Malaysia. J. Southeast Asian Earth Sciences 9, p. 129-151.
(M-U Permian-Triassic Ratburi Lst of Peninsular Thailand and Chuping Lst of NW Peninsular Malaysia with rel. low diversity corals and fusulinids (Pseudofusulina, Staffella, Monodiexodina), and with forams incl. Hemigordiopsis and Shanita. These characterize a well-defined biogeographic unit (Shan-Tai/ Sibumasu terrane; JTvG). Noted similarities of several fossil groups with Timor Permian faunas)

Fontaine, H., P. David, R. Pardede & N. Suwarna (1983)- Marine Jurassic in Southeast Asia. UN-ESCAP CCOP, Technical Bulletin 16, p. 3-30.
(online at: https://repository.unescap.org/items/72341977-4dbb-441d-962f-088707385870)
(Jurassic in W Philippines (Palawan Block), W Borneo, W Sumatra, Malay Peninsula, Thailand, Kampuchea and Vietnam. Marine Jurassic generally in limited areas only, and incomplete sections. Strong faunal affinities with Tethyan realm in E-M Jurassic, with Jurassic of Japan in Upper Jurassic)

Fontaine, H. & M. Mainguy (1981)- Pre-Tertiary hydrocarbon potential of the South China Sea. Proc. EAPI/CCOP Workshop, Energy 6, 11, p. 1165-1177.
(Similar paper to Fontaine (1981), above)

Fontaine, H. & M. Mainguy (1985)- Pre-Tertiary oil and gas potential in the South China Sea. Proc. 2nd EAPI/CCOP Workshop, Energy 10, 3-4, p. 403-412.
(Mainly addendum to paper above on distribution of pre-Tertiary sediments in SE Asia and petroleum potential. Permian limestone section probably best target for petroleum exploration. Pre-Tertiary sediments probably gas prone)

Fontaine, H. & V. Suteethorn (1992)- Permian corals of Southeast Asia and the bearing of a recent discovery of Lower Permian corals in Northeast Thailand. In: C. Piencharoen (ed.) Proc. National Conference on Geologic Resources of Thailand: potential for future development, Bangkok 1992, Dept. of Mineral Resources (DMR), p. 346-354. *(online at: http://library.dmr.go.th/elib/cgi-bin/opacexe.exe?op=mmvw&db=Main&skin=s&mmid=8934&bid=6234)*
(Brief review of Permian corals of SE Asia. Permian corals of Thailand more diverse than Peninsular Thailand, NW Peninsular Malaysia and Timor, all of which are richer and more prolific than those from Australia. Timor corals rel. low diversity, mainly solitary Rugosa without dissipiments and some Tabulata. S Sumatra corals of Padang and W Jambi regions high diversity Permian reefal limestone (M Permian Guguk Bulat, etc.). M Carboniferous- basal M Permian Terbat Lst of W Borneo locally common fusulinids, but few or no corals. New

Lower Permian fossil localities in NE Thailand (Loei) with solitary and compound rugose corals, incl. Kepingophyllidae)

Fortey, R.A. & L.R.M. Cocks (1998)- Biogeography and palaeogeography of the Sibumasu terrane in the Ordovician: a review. In: R. Hall & J.D. Holloway (eds.) Biogeography and geological evolution of SE Asia, Backhuys Publishers, Amsterdam, p. 43-56.
(online at: http://searg.rhul.ac.uk/searg_uploads/2016/01/Fortey_Cocks.pdf)
(Sibumasu (=Shan-Tai) paleocontinent comprises Sumatra, Malaysia, W Thailand and Burma. Ordovician rocks in China, Burma, S Thailand and interior Australia mainly carbonates. Lower Ordovician shelf faunas from Thailand- Langkawi low-latitude faunas, with affinities with N China- Australia, but M-U Ordovician trilobites most similar to S China)

Fourcade, E., J. Azema, J.P. Bassoullet, F. Cecca, J. Dercourt, R. Enay & R. Guiraud (1995)- Palaeogeography and palaeoenvironments of the Tethys during Jurassic Pangaean break-up. In: A.E.M. Nairn, L.E. Ricou et al. (eds.) The ocean basins and margins 8, The Tethys Ocean. Plenum, New York, Chapter 3B, p. 191-214.

Fournier, M., L. Jolivet, P. Davy & J. Thomas (2004)- Backarc extension and collision: an experimental approach to the tectonics of Asia. Geophysical J. International 157, 2, p. 871-889.
(online at: https://academic.oup.com/gji/article/157/2/871/2080608)
(Modeling of E Asia deformation. Large parts of SE Asia affected by subduction-related extension, interacting with far field effects of India- Asia collision. Major backarc basins associated with ~N-S right-lateral strike-slip faults which accommodate N-ward penetration of India into Eurasia)

Fujikawa, M. & T. Ishibashi (2000)- Paleozoic ammonoid paleobiogeography in Southeast Asia. Geosciences Journal 4, 4, p. 295-300.
(Paleobiogeography of Late Paleozoic ammonoids in SE Asia. Sibumasu terrane separated from Gondwanaland in E-M Permian. Contrary to previous opinion, no close faunal resemblance between Indochina and S China from Pennsylvanian to M Permian)

Fujiwara, K.P., H. Zaman, A. Surinkum, N. Chaiwong, M. Fujihara, H.S. Ahn & Y. Otofuji (2014)- New insights into regional tectonics of the Indochina Peninsula inferred from Lower-Middle Jurassic paleomagnetic data of the Sibumasu Terrane. J. Asian Earth Sciences 94, p. 126-138.
(Sibumasu Terrane between CW-rotated Indochina Block and CCW-rotated S Sundaland Block. Paleomagnetic data from E-M Jurassic Umphang Gp red sandstones in Ratchaburi area variable declinations (348.5° and 44.7°) for Sibumasu. Sibumasu Terrane behaved as independent fragment when Indochina was undergoing CW rotation and S-ward displacement, as result of extrusion tectonics after India-Asia collision. CCW rotation of 15° estimated for Sibumasu Terrane, as result of continuous N-ward indentation of Australian Plate into S Sundaland Block)

Fuller, M., R. Haston, J.L. Lin, B. Richter, E. Schmidtke & J. Almasco (1991)- Tertiary paleomagnetism of regions around the South China Sea. J. Southeast Asian Earth Sciences 6, 3-4, p. 161-184.
(Paleomag data for Borneo, Malay Peninsula, Philippines)

Fyhn, M.B.W., P.F. Green, S.C. Bergman, J. Van Itterbeeck, T.V. Tri, P.T. Dien, I. Abatzis, T.B. Thomsen, S. Chea, S.A.S. Pedersen et al. (2016)- Cenozoic deformation and exhumation of the Kampot Fold Belt and implications for south Indochina tectonics. J. of Geophysical Research: Solid Earth 121, 7, p. 5278-5307.
(Latest Mesozoic- earliest Cenozoic deformation of Sundaland core between SE Asian fusion and Cenozoic era of rifting and basin formation. In S Cambodia and Vietnam major latest Cretaceous- Paleocene thrusting and uplift of Kampot Fold Belt and surrounding regions, with up to ~11 km exhumation. Latest Cretaceous-Paleocene orogenesis affected much of greater Indochina, probably due to plate collision along E Sundaland or combination of collisions along E and W Sundaland. AFTA and ZFTA data document protracted cooling of Cretaceous granites and locally elevated thermal gradients 10's of My afterr emplacement. Thermalgradient stabilized by E Miocene time, and Miocene cooling probably reflects renewed denudation pulse)

Gan, C.S.. Y. Zhang, Y, Wang, X. Qian & Y. Wang (2021)- Reappraisal of the Mesozoic tectonic transition from the Paleo-Tethyan to Paleo-Pacific domains in South China. Geological Society of America (GSA) Bull. 133, 11-12, p. 2582-2590.
(Triassic and Jurassic igneous rocks and detrital zircon data of contemporaneous sediments in SE South China Block suggest transition from Paleo-Tethyan to Paleo-Pacific dynamic domain during E-M Jurassic)

Gao, B., J. Chen, W. Qie & X. Wang (2022)- Revisiting the paleogeographic framework of northeastern Gondwana in the late Paleozoic: implications from detrital zircon analysis. Sedimentary Geology 434, 3-4, 106144, p. 1-18.
(Baoshan, Tengchong, Lhasa, S Qiangtang, and Sibumasu terranes were part of Gondwana prior to rifting and drifting from N margin since E Permian. Zircon data suggest S Qiangtang, Baoshan and part of Sibumasu were outboard of N margin of Indian Gondwana during Paleozoic, whereas Lhasa and Sumatra terranes were located along N margin of Australia. Provenance shifts of late Paleozoic glaciogenic sedimentary rocks in NE Gondwana suggests two main ice sheets developed during late Paleozoic)

Gao, X., X. Ma & X. Li (2011)- The great triangular seismic region in eastern Asia: thoughts on its dynamic context. Geoscience Frontiers 2, 1, p. 57-65.
(online at: http://ac.els-cdn.com/)
(On SE Asia earthquake distributions and major plate movements)

Gatinsky, Y.G. (1986)- Geodynamics of Southeast Asia in relation to the evolution of ocean basins. Palaeogeogr. Palaeoclim. Palaeoecology 55, p. 127-144.
(Geodynamics of SE Asia closely connected with cyclic development of large oceanic basins: Paleotethys (M Paleozoic-E Mesozoic), Tethys (end Paleozoic- beginning Cenozoic), and Indian and Pacific Oceans (Late Mesozoic- Cenozoic). Opening of basins accompanied by simultaneous closing of earlier basins)

Gatinsky, Y.G. & C.S. Hutchison (1986)- Cathaysia, Gondwanaland, and the Paleotethys in the evolution of continental Southeast Asia. In: G.H. Teh & S. Paramananthan (eds.) Proc. 5th Regional Congress Geology, Mineral Energy Resources of SE Asia (GEOSEA V), Kuala Lumpur 1984, 1, Bull. Geological Society Malaysia 19, p. 179-199.
(online at: https://gsmpubl.files.wordpress.com/2014/09/bgsm1986b10.pdf)
(Continental SE Asia dominated by Precambrian continental blocks overlain by Late Proterozoic-Paleozoic platform successions. Most blocks rifted and drifted from Australian Gondwanaland in Early Paleozoic and were in equatorial position by Permian time. Between blocks are intensely folded mobile belts. West Borneo block initial separation from Eurasia in Late Triassic-Jurassic (creation of Proto-South China Sea), then detached from Indosinia in Late Cretaceous-Paleogene and moved S along fault margin of Vietnam shelf)

Gatinsky, Y.G., C.S. Hutchison, N.N. Minh & T.V. Tri (1984)- Tectonic evolution of Southeast Asia. 27th International Geological Congress, Moscow, Report 5, p. 225-239.

Gatinsky, Y.G., A.V. Mischina, I.V. Vinogradov & A.A. Kovalev (1978)- The main metallogenic belts of Southeast Asia as the result of different geodynamic conditions interference. In: P. Nutalaya (ed.) Proc. 3rd Regional Conference Geology and Mineral Resources of SE Asia (GEOSEA III), Bangkok, Asian Institute of Technology, p. 313-318.
(Majority of mineral occurrences of SE Asia in five metallogenic belts)

Gatinsky, Y.G., Y.G. Zorina & A.A. Chistyakov (1983)- Fault tectonics in Southeast Asia. Proc. 19th Session Committee Co-ord. Joint Prospecting Mineral Resources in Asian Offshore Areas (CCOP), Tokyo 1982, 2, Technical Reports, p. 243-253.
(Brief descriptions of characteristics of main fault zones in SE Asia)

Geyer, O.F. (1977)- Die "*Lithiotis*-Kalke" im Bereich der unterjurassischen Tethys. Neues Jahrbuch Geologie Palaontologie, Abhandlungen 153, p. 304-340.

('The Lithiotis limestones' in the Early Jurassic Tethys Realm'. Tethyan Early Jurassic reefal limestones commonly dominated by large thick-walled Lithiotis-type bivalves (also present in Fatu Limestones of Timor; Krumbeck 1923, Hayami 1984))

Gibbons, A. (2012)- Regional plate tectonic reconstructions of the Indian Ocean. Ph.D. Thesis University of Sydney, p. 1-185.
(online at: http://ses.library.usyd.edu.au/handle/2123/8580)
(New model of Indian Ocean plate tectonic history, suggesting smaller extent of Greater India and later collision than previous models. Main driver is Jurassic rock sample dredged from Cretaceous Wharton basin off W Australia. Argoland accreted to equatorial intra-oceanic arc at ~126 Ma (E Cretaceous; obduction event recorded in zircons from ophiolites in Yarlung-Tsangpo suture zone between Indian and Eurasian blocks). E Argoland accreted to Sumatra at ~80 Ma, possibly re-attaching Woyla Terranes back to Sumatra margin. Greater India's indenter, Gascoyne block, reached W Burma and E edge of intra-oceanic arc at ~50 Ma, as India continued to migrate North. Final collision between Greater India (accreted to intra-oceanic arc) and Eurasia did not take place until ~35 Ma)

Gibbons, A., J.M. Whittaker & R.D. Muller (2013)- The breakup of East Gondwana: assimilating constraints from Cretaceous ocean basins around India into a best-fit tectonic model. J. of Geophysical Research: Solid Earth 118, 3, p. 808-822.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1002/jgrb.50079)
(Mainly on terranes leaving East Gondwana, which separated from Africa in M-Jurassic. Breakup of Greater India from Australia-Antarctica started at ~136 Ma (E Cretaceous). Seafloor spreading between Australia and Antartica started at ~83-79 Ma (~Campanian, Late Cretaceous). Etc.)

Gibbons, A.D., S. Zahirovic, R.D. Muller, J.M. Whittaker & V. Yatheesh (2015)- A tectonic model reconciling evidence for the collisions between India, Eurasia and intra-oceanic arcs of the central-eastern Tethys. Gondwana Research 28, 2, p. 451-492.
(manuscript online at: https://earthbyte.org/Resources/Pdf/Gibbons_etal_2015_Tectonic_model_collisions_India-Eurasia_intra-oceanic_arcs_Central-Eastern_Tethys.pdf)
(Plate tectonic model for India-Eurasia collision. With plate reconstructions since M Jurassic (160 Ma) and including chapter on SE Asia and Woyla Arc of Sumatra)

Gobbett, D.J. (1973)- Carboniferous and Permian correlation in Southeast Asia In: B.K. Tan (ed.) Proc. Regional Conference on the Geology of SE Asia, Kuala Lumpur 1972, Bull. Geological Society Malaysia 6, p. 131-142.
(online at: https://gsm.org.my/products/702001-101350-PDF.pdf)
(Late Paleozoic rocks from Thailand, Malaysia, Myanmar, Vietnam, Laos, Cambodia, Sumatra, Borneo, etc.))

Goldfarb, R.J., R.D.Taylor, G.S. Collins, N.A. Goryachev & O.F. Orlandini (2014)- Phanerozoic continental growth and gold metallogeny of Asia. Gondwana Research 25, p. 48-102.
(Review of tectonic evolution and associated gold deposits of mainland Asia in past 800 Myrs. Nothing on Indonesia)

Golonka, J. (2007)- Late Triassic and Early Jurassic palaeogeography of the world. Palaeogeogr. Palaeoclim. Palaeoecology 244, p. 297-307.
(Paleogeographic maps for Late Triassic (Carnian-Norian) and E Jurassic (Hettangian-Toarcian). Triassic continued N-ward drift of Cimmerian continent corresponded with closure and consumption of Paleotethys and opening of Neotethys. Most significant Late Triassic convergent event was Indosinian orogeny, result of consolidation of S and N China blocks. Also, Indochina and 'Indonesia' sutured to S China. Triassic- Jurassic boundary important biotic extinction event)

Golonka, J. (2007)- Phanerozoic paleoenvironment and paleolithofacies maps- Late Paleozoic. Geologia 33, 2, p. 145-209.
(online at: http://journals.bg.agh.edu.pl/GEOLOGIA/2007-02/Geologia_2007_2_01.pdf)

(Global plate tectonic and paleogeographic maps for 8 E Devonian- Permian time intervals. Includes Australia- SE Asia blocks evolution. 'Indonesia' shown as part of Cimmerian Blocks that rifted off Gondwana in Permian and collide with mainland SE Asia in Triassic)

Golonka, J. (2007)- Phanerozoic paleoenvironment and paleolithofacies maps- Mesozoic. Geologia 33, 2, p. 211-264. *(online at: https://www.infona.pl/resource/bwmeta1.element.baztech-article-AGH5-0014-0138/content/partDownload/013ae5dd-4beb-3cdb-8fba-a89e19fc09ef)*
(Global plate tectonic and paleogeographic maps for 8 Mesozoic time intervals. Most significant Triassic convergent event was Indosinian orogeny (collision of Indochina and Indonesia with S China). N-ward drift of Cimmerian continents driven by closing of Paleotethys and opening of Neotethys Ocean. SE Asia not very well portrayed in this global map series)

Golonka, J. (2009)- Phanerozoic paleoenvironment and paleolithofacies maps- Cenozoic. Geologia 35, 4, p. 507-587.
(online at: http://journals.bg.agh.edu.pl/GEOLOGIA/2009-04/Geologia_2009_4_01.pdf)

Golonka, J. (2009)- Phanerozoic paleoenvironment and paleolithofacies maps- Early Paleozoic. Geologia 35, 4, p. 589-654.
(online at: http://journals.bg.agh.edu.pl/GEOLOGIA/2009-04/Geologia_2009_4_02.pdf)
(Global plate tectonic and paleogeographic maps for 8 Cambrian- Silurian time intervals. Australia and China blocks in low northern latitudes)

Golonka, J. (2012)- Paleozoic paleoenvironment and paleolithofacies maps of Gondwana. AGH University of Science and Technology Press, Krakow, p. 1-82.
(Paleozoic global plate reconstructions, with focus on Gondwana region)

Golonka, J., A. Embry & M. Krobicki (2018)- Late Triassic global plate tectonics. In: L.H. Tanner (Ed.) The Late Triassic World, Earth in a time of transition, Topics in Geobiology 46, Springer International, Chapter 2, p. 27-57.
(Late Triassic global plate reconstruction, at time of Early Cimmerian and Indosinian orogenies that closed Paleotethys Ocean (earlier in Alpine-Carpathian-Mediterranean area, and latest in SE Asia). Pulling force of N-dipping subduction along N margin of Neotethys (= Mesotethys) caused drifting of new set of plates from passive Gondwana margin, dividing Neotethys Ocean (= opening of Cenotethys; Lhasa plate separation))

Golonka, J. & D. Ford (2000)- Pangean (Late Carboniferous-Middle Jurassic) paleoenvironment and lithofacies. Palaeogeogr. Palaeoclim. Palaeoecology 161, p. 1-34.
(Six global rconstructions for Pangea from Late Carboniferous- M Jurassic. Most of Indonesia shown as part of 'Cimmerian Plates' that rifted from Gondwana in Permian and sutured with SE Asia in Late Triassic)

Golonka J. & A. Gaweda (2012)- Plate tectonic evolution of the southern margin of Laurussia in the Paleozoic. In: E. Sharkov (ed.) Tectonics- Recent advances, Chapter 10, InTech, p. 261-282.
(online at: http://cdn.intechopen.com/pdfs-wm/37859.pdf)
(Trench-pulling effect of N-dipping subduction at S margin of Eurasia caused rifting as well as transfer of plates from Gondwana to Laurasia. This model applied here to S margin of Laurussia in Paleozoic times. With 12 plate tectonic maps for time slices from Early Cambrian- Late Carboniferous)

Golonka, J., M. Krobicki & Nguyen Van Giang (2006)- Paleogeographic maps of Southeast Asia. Proc. Second Int. Workshop IGCP Project 480, Structural and tectonic correlation across the Central Asian orogenic collage, Ulaanbaatar 2006, p. 71-74. *(Extended Abstract only)*
(online at: www.igcp.itu.edu.tr/Publications/GolonkaKrob_06.pdf)

Golonka, J., M. Krobicki, J. Pajak & Nguyen Van Giang & W. Zuchiewich (2006)- Phanerozoic palaeogeography of Southeast Asia. Geolines 20, p. 40-43. *(Extended Abstract only)*
(online at: http://geolines.gli.cas.cz/fileadmin/volumes/volume20/G20-040.pdf)

(Brief summary of larger SE Asia project)

Golonka, J., M. Krobicki, J. Pajak, Nguyen Van Giang & W. Zuchiewicz (2006)- Global plate tectonics and paleogeography of Southeast Asia. Faculty of Geology, Geophysics and Environmental Protection, AGH University of Science and Technology, Arkadia, Krakow, p. 1-128.
(Major review of global plate tectonic evolution from Cambrian- Recent in 32 maps/ time slices, with detailed maps for SE Asia (Vietnam focused). Differs from recent Hall and Metcalfe models in depicting a more 'traditional' view of SW Borneo as always having been part of Indochina-Sibumasu complex (which rifted off the Indochina/ S China margin by opening of Proto- South China Sea in Jurassic or Cretaceous))

Golonka, J., M. Krobicki, Z. Paul & A. Khudoley (2006)- Central Asia- Southeast Asia connection during Paleozoic orogenies: problems and questions. Geolines 20, p. 21-23.
(online at: www.igcp.itu.edu.tr/Publications/Golonka_06.pdf)
(Peak of Paleozoic orogenesis in SE Asia and S China in Silurian- earliest Devonian. In N Vietnam deep water Ordovician and Silurian synorogenic deposits overlain by continental E Devonian red beds. With plate tectonic map for Early Ordovician)

Gorur, N. & A.M.C. Sengor (1992)- Paleogeography and tectonic evolution of the Eastern Tethysides: implications for the Northwest Australian margin breakup history. In: U. von Rad et al. (eds.) Proc. Ocean Drilling Program (ODP), Scientific Results 122, College Station, p. 83-106.
(online at: www-odp.tamu.edu/publications/122_SR/VOLUME/CHAPTERS/sr122_05.pdf)
(Last major breakup from NW Australian continental margin (Exmouth, Wombat, Scott Plateaus) (often named 'Argoland')) in Berriasian- Hauterivian. Major continental fragments in Asiatic Tethyside orogenic collage already collided with Asia by that time. Similarity of Mesozoic geological record suggests Sikuleh-Natal continental sliver in Sumatra, plus possible extensions in Java probably were continental object that left NW Australia in Berriasian- Hauterivian. This sliver records E Cretaceous rapid subsidence and collision with Sumatra along Woyla suture in Late Cretaceous. NW Australian margin two older breakup events: (1) latest Carboniferous-earliest Permian: departure of Sibumasu block and E Cimmerian continent (Baoxan, W Thailand, E Burma), W Malaya and part of C Sumatra; (2) Late Triassic-Jurassic. Lhasa- C Burma block left Gondwanaland, which leads us to think breakup event was latest Triassic, probably Rhaetian)

Grant-Mackie, J.A., Y. Aita, B.E. Balme, H.J. Campbell, A.B. Challinor, D.A.B. MacFarlan, R.E. Molnar, G.R. Stevens & R.A.Thulborn (2000)- Jurassic palaeobiogeography of Australasia. In: A.J. Wright (ed.) Palaeobiogeogeography of Australasia, Memoir Assoc. Australasian Palaeontologists (AAP) 23, p. 311-353.
(Review of Australian Jurassic fossils distribution)

Grunow, A.M. (1999)- Gondwanan events and palaeogeography: a palaeomagnetic review. J. African Earth Sciences 28, 1, p. 53-69.

Guillot, S., K. Hattori, P. Agard & S. Schwartz & O. Vidal (2009)- Exhumation processes in oceanic and continental subduction contexts: a review. In: S. Lallemand and F. Funiciello (eds.) Subduction zone geodynamics, Springer-Verlag p. 175-205.
(Review of exhumation of high and ultrahigh pressure metamorphic rocks and ophiolites. Three types of subduction zones: (1) Accretionary-type subduction zones exhume HP metasedimentary rocks by underplating; (2) Serpentinite-type subduction zones exhume HP to UHP in 1-10 km thick serpentinite subduction channel (incl. Bantimala, Sulawesi, Luk Ulo, C Java); (3) continental-type subductions exhume UHP rocks of continental origin. With examples from SE Asia)

Guo, F. (1990)- Terranes of Southwest China since the Late Paleozoic. In: T.J. Wiley et al. (eds.) Terrane analysis of China and the Pacific Rim, Circum-Pacific Council Energy and Mineral Resources, Houston, Earth Sci. Publ. 13, p.

Guo, F. (1991)- The boundary between Gondwana and Pacifica and the suturing ages of their allied terranes in Southwestern China. Acta Geologica Sinica (English Ed.) 4, p. 87-95.

(Two terrane groups in SW China: (1) with Permo-Carboniferous ice-rafted marine sediments and cold-water fauna of Gondwana facies (Gangmar Co, Lhasa, Sa' gya, Tengchong, Baoshan terranes), (2) with Yangtze-type U Paleozoic with Cathaysian flora and Pacific-type fusulinids (Changning-Menglian, Shuangjiang-Lancang, Qamdo and Bayan Har terranes). Longmu Co-Shuanghu-Dengqen- N Lancang River- Kejie-Mengding suture zone between two groups is boundary between Gondwana and Pacifica in SW China. Baoshan and Nyainrong-Sog in Lhasa composite terrane first combined with Asian continent in early E Jurassic. N Tibet- W Yunnan microplate (with Gangmar Co, Lhasa, Tengchong terranes) collided with Asia at end of E Cretaceous)

Hada, S., K. Ishii, C.A. Landis, J. Aitchison & S. Yoshikura (2001)- Kurosegawa Terrane in Southwest Japan: disrupted remnants of a Gondwana-derived terrane. Gondwana Research 4, p. 27-38.
(Kurosegawa Terrane in SW Japan, between two Mesozoic subduction complex terranes, is exotic terrane with Permian limestones with fusulinacean forams Cancellina, Colania and Lepidolina, suggesting terrane once situated within Colania- Lepidolina territory in E Tethys-Panthalassa region at equatorial latitude, possibly close to E margin of S China or Indochina-E Malaya continental blocks. These blocks had rifted from Gondwana by Late Devonian. Amalgamated with proto-Asian continent (S China?) in Late Triassic (or later))

Hall, R. (2015)- Provenance and basement studies of SE Asia. Proc. Asia Petroleum Geoscience Conference and Exhibition (APGCE), Kuala Lumpur, p. 1-5. *(Extended Abstract)*
(Brief review of recent Royal Holloway sandstone provenance work (Gunawan, Sevastjanova, Zimmermann))

Hall, R. & H. Breitfeld (2017)- Nature and demise of the Proto-South China Sea. Bull. Geological Society Malaysia 63 (50th Anniversary Issue 1), p. 61-76.
(online at: www.gsm.org.my/products/702001-101708-PDF.pdf)
(Proto-South China Sea should be used only for oceanic slab subducted beneath Sabah and Cagayan between Eocene- E Miocene; Paleo-Pacific Ocean used here for lithosphere subducted under Borneo in Cretaceous. Good evidence for subduction between Eocene- E Miocene below Sabah, and W limit of Proto-S China Sea subduction was W Baram Line; subducted slab imaged in lower mantle by P-wave tomography. Present-day NW Borneo Trough and Palawan Trough not subduction trenches: NW Borneo Trough flexural response to gravity-driven deformation of Neogene sediment wedge NW of Sabah. Palawan Trough is continent-ocean transition at SE edge of modern S China Sea)

Hall, R., M.A. Cottam & M.E.J. Wilson (2011)- The SE Asian gateway: history and tectonics of the Australia-Asia collision. In: R. Hall, M.A. Cottam & M.E.J. Wilson (eds.) The SE Asian gateway: history and tectonics of the Australia-Asia collision, Geol. Soc, London, Special Publ. 355, p. 1-6.
(Introduction to collection of geological papers on E Indonesia from 2009 SAGE conference)

Hallam, A. (1986)- Evidence of displaced terranes from Permian to Jurassic faunas around the Pacific margins. J. Geological Society, London, 143, p. 209-216.
(Permian- Jurassic Tethyan marine invertebrate faunas from low latitude can be distinguished from less diverse higher latitude faunas. Displacement of these low-latitude faunas high latitudes around Pacific margins provides evidence for movement of displaced terranes. Fullest story worked out for W margin of N America, as far N as S Alaska. Also evidence for N-ward movement of continental segments along NE Asian margin. Torlesse Terrane of New Zealand appears to have moved considerable distance S-wards)

Halle, T.G. (1935)- On the distribution of the Late Palaeozoic floras in Asia. Geografiska Annaler 17, Suppl. (Sven Hedin volume), p. 106-111.
(First paper to recognize three Permian floral provinces in Asia: Indian Gondwanan-Glossopteris in SW, Angara flora in N, Cathaysian/ Sino-Malayan or Gigantopteris flora in SE. No figures)

Hao, S. & P.G. Gensel (1998)- Some new plant finds from the Posongchong Formation of Yunnan, and consideration of a phytogeographic similarity between South China and Australia during the Early Devonian. Science in China, ser. D, 41, 1, p. 1-13.
(online at: http://engine.scichina.com/publisher/scp/journal/Sci%20China%20Earth%20Sci-D/41/1/10.1007/BF02932414?slug=full%20text)

(E Devonian plants from Posongchong Fm of SE Yunnan, suggest E Devonian NE Gondwana phytogeographic unit in Equatorial position, comprising Australia, S China Block and perhaps Shan-Thai Block)

Haproff, P.J., A.V. Zuza, An Yin, T. M. Harrison, C.E. Manning, C.S. Dubey, L. Ding, C. Wu & J. Chen (2019)- Geologic framework of the northern Indo-Burma Ranges and lateral correlation of Himalayan-Tibetan lithologic units across the eastern Himalayan syntaxis. Geosphere 15, 3, p. 856-881.
(online at: https://pubs.geoscienceworld.org/gsa/geosphere/article/15/3/856/569860/Geologic-framework-of-the-northern-Indo-Burma)
(Major lithologic units of the eastern Himalyan Orogen, exposed in N Indo-Burma Ranges, the N-most segment of 'Eastern Flanking Belt' (NE India?) and correlation of these units with classic lithologic divisions of Himalayan orogen and Lhasa terrane to W)

Harzhauser, M., A. Kroh, O. Mandic, W.E. Piller, U. Gohlich, M. Reuter & B. Berning (2007)- Biogeographic responses to geodynamics: a key study all around the Oligo-Miocene Tethyan Seaway. In: 48th Phylogenetic Symposium on historical biogeography, Zoologischer Anzeiger 246, 4, p. 241-256.
(Extensive terrestrial exchanges initiated by closure of Tethyan Seaway in Early Miocene. Until closure, marine faunal exchange via Mesopotamian Trough and Zagros Basin, reflected by Indonesian corals in Iran and 'western' gastropods in Pakistan and India. Divergences on both sides of seaway starting in Oligocene. Around closure event Proto-Mediterranean faunas already little in common with Indo-West Pacific Region)

Hasegawa, S. (1996)- Ridge subduction model- a mechanism for an earlier South China Sea opening and an alternative paleogeographic reconstruction of Southeast Asia. Proc. 11th Offshore Southeast Asia Conference Exhibition (OSEA96), Singapore 1996, p. 155-167.
(Late Mesozoic- Tertiary plate reconstruction, generally compatible with Tapponnier extrusion model. The now subducted Kula-Pacific Ridge beneath Eurasia Plate caused S China basins rifting and provides heat under S China continental crust)

Hashimoto, W., E. Aliate, N. Aoki, G. Balce, T. Ishibashi, N. Kitamura, T. Matsumoto, M. Tamura & J. Yanagida (1975)- Cretaceous system of Southeast Asia. In: T. Kobayashi & R. Toriyama (eds.) Geology and Palaeontology of Southeast Asia, University of Tokyo Press, 15, p. 219-287.
(online at: http://twgeoref.moeacgs.gov.tw/star/1975/19750026/0219.pdf)
(Extensive review of Japanese work on Cretaceous stratigraphy and paleontology of Taiwan, Philippines, Borneo, Java, Sulawesi, etc. Incl. significant details on Cretaceous Orbitolina occurrences on Borneo)

Hashimoto, W. & T. Sato (1980)- Correlation of the structural belts in East and Southeast Asia. In: T. Kobayashi, R. Toriyama et al. (eds.) Symposium on the geology and paleontology of SE Asia, Tsukuba 1978, Geology and Palaeontology of Southeast Asia, University of Tokyo Press, 21, p. 343-356.
(Brief review of Mesozoic and Cenozoic structural belts of SE and East Asia)

Hayami, I. (1984)- Jurassic marine bivalve faunas and biogeography in Southeast Asia. In: T. Kobayashi et al. (eds.) Geology and Palaeontology of Southeast Asia 25, University of Tokyo Press, p. 229-237.
(Unique E Jurassic (Pliensbachian?) heavy bivalve assemblage from Timor with Lithiotis, Pachymegalodon, Gervilleioperna, etc. described from Fatu Lst of Timor by Krumbeck (1923). Upper Jurassic bivalves in W Borneo part of East Asian Province with Philippines and Japan. Timor-Roti, Seram, Misool, etc., are part of Maorian Province with Malayomaorica and Retroceramus haasti)

He, C., S. Dong, M. Santosh & X. Chen (2012)- Seismic evidence for a geosuture between the Yangtze and Cathaysia Blocks, South China. Nature Scientific Reports 3, 2200, p. 1-7.
(online at: https://www.nature.com/articles/srep02200.pdf)
(S China block composed of sub-blocks Yangtze in NW and Cathaysia in SE, which collided and amalgamated in Neoproterozoic along Jiangnan Orogen. Felsic lower crust of Cathaysia Block and Jiangnan orogenic belt may represent fragments derived from Gondwana supercontinent)

Heine, C. (2002)- The tectonic evolution of the Northwest Shelf of Australia and southern Southeast Asia. M.Sc. Thesis Ruhr-Universat Bochum and University of Sydney, p. 1-94.
(online at: www.earthbyte.org/people/christian/media/Heine_02_MScThesis_e-version.pdf)
(Argo and Gascoyne Abyssal Plains off NW Australia are the only preserved patches of Tethyan ocean floor; rest destroyed by subduction. W Burma Block identified as continental fragment breaking up from NW Shelf in Late Jurassic and accreted to SE Asian mainland in Santonian-Coniacian (85-80Ma) near W Thailand)

Heine, C., R.D. Muller & C. Gaina (2004)- Reconstructing the lost Eastern Tethys Ocean basin: convergence of the SE Asian margin and marine gateways. In: P. Clift et al. (eds.) Continent-ocean interactions within East Asian marginal seas, American Geophysical Union (AGU), Geophysical Monograph Series 149, p. 37-54.
(online at: https://www.paleoearthlabs.org/pdf/Heine_04_LostTethysOceanBasin_AGU-GM.pdf)
(Reconstruction of E Tethys (Mesotethys and Neotethys) ocean basin for last 160 Myr, with reconstructions in 20 Myr increments, constrained by magnetic anomalies in Argo and Gascoyne abyssal plains of Australia NW shelf, assuming symmetrical spreading, etc.)

Helmcke, D. (1983)- On the Variscan evolution of Central Mainland Southeast Asia. Earth Evolution Sciences, 1982, 4, p. 309-319

Helmcke, D. (1984)- The orogenic evolution (Permian-Triassic) of central Thailand. Implications on paleogeographic models for mainland SE Asia. Memoires Societe Geologique France, N.S., 147, p. 83-91.

Helmcke, D. (1985)- The Permo-Triassic 'Paleotethys' in mainland Southeast Asia and adjacent parts of China. Geologische Rundschau 74, 2, p. 215-228.
(Discussion of geodynamic evolution of mainland SE Asia and China. Permo-Triassic 'Paleotethys' suture must be expected S of Tibet and in Burma. All sutures in Thailand, Vietnam and Yunnan already closed during Paleozoic)

Helmcke, D., R. Ingavat-Helmcke & D. Meischner (1993)- Spatvariszische Orogenese und Terranes in Sudost-Asien. Gottinger Arbeiten Geologie Palaeontologie, 58, p. 29-38.
('Late Variscan orogenesis and terranes in Southeast Asia')

Henderson, R.A., J.S. Crampton, M.E. Dettmann, J.G. Douglas, D. Haig, S. Shafik, J.D. Stilwell & R.A. Thulborn (2000)- Biogeographical observations on the Cretaceous biota of Australasia. In: A.J. Wright et al. (eds.) Palaeobiogeography of Australasian faunas and floras, Memoir Assoc. Australasian Palaeontologists (AAP) 23, p. 355-404.
(Overview of Cretaceous macrofauna, microfauna, flora in Australia. Maximum paleobiogeographic gradients in Albian, Late Campanian and Maastrichtian)

Herngreen, G.F.W., M. Kedves, L.V. Rovnina & S.B. Smirnova (1996)- Cretaceous palynological provinces: a review. In: J. Jansonius & D.C. MacGregor (eds.) Palynology: principles and applications, American Assoc. Stratigraphic Palynologists (AASP) Found. 3, p. 1157-1188.
(Includes map of Albian-Cenomanian tropical-subtropical Elaterosporites microfloral province (peaking in subtropical arid climate?). Also known from PNG)

Hirsch, F., K. Ishida, T. Kozai & A. Meesook (2006)- The welding of Shan-Thai. Geosciences Journal (Geological Society Korea), 10, 3, p. 195-204.
(online at: https://www.researchgate.net/profile/Francis-Hirsch/publication/225772382_The_welding_of_Shan-Thai/links/02e7e527e0d27785a2000000/The-welding-of-Shan-Thai.pdf)
(Shan-Thai Terrane is remnant of 'poly-island' Paleo-Tethys oceanic system in SE Asia. It is composite terrane, with Cathaysian internal elements and transitional 'Sibumasu' central part. External 'Shan' elements left Gondwana last and have clear cold-water imprint. Final welding and Paleotethys closure in end Triassic-earliest Jurassic Late Indosinian event. Cenozoic Himalayan escape tectonics compressed Shan-Thai, opened Gulf of Thailand and disrupted original alignment of Gondwana-Tethys divide)

Hobbs, W.H. (1944)- Mountain growth, a study of the Southwestern Pacific Region. Proc. American Philosophical Soc. 88, 4, p. 221-268.
(Old review of SW Pacific mountain systems, including Sunda-Banda Arc)

Holcombe, C.J. (1977)- How rigid are the lithospheric plates? Fault and shear rotations in southeast Asia. J. Geological Society, London, 134, p. 325-342.
(Significant fault movement in Tertiary in continental SE Asia. Three rotations: Indochina subplates wrench rotation, Sunda shear rotation, and rotation of Malay Peninsula and Sunda Platform by movements along Ranong and Semangko faults)

Holloway, J. & R. Hall (1998)- SE Asian geology and biogeography: an introduction. In: R. Hall & J.D. Holloway (eds.) Biogeography and geological evolution of SE Asia, Backhuys Publishers, p. 1-23.

Holloway, J. (1998)- Geological signal and dispersal noise in two contrasting insect groups in the Indo-Australian tropics: R-mode analysis of patterns in Lepidoptera and cicadas. In: R. Hall & J.D. Holloway (eds.) Biogeography and geological evolution of SE Asia, Backhuys Publishers, p. 291-314.

Honza, E. & K. Fujioka (2004)- Formation of arcs and backarc basins inferred from the tectonic evolution of Southeast Asia since the Late Cretaceous. Tectonophysics 384, p. 23-53.
(New data in NW West Philippines basin Daito Ridge used to reconstruct Late Cretaceous- Tertiary plate tectonics of SE Asia. In model S Borneo rotated 90° CCW since Cretaceous)

Hou, Z., R. Wang, H. Zhang, Y. Zheng, S. Jin, H. Thybo, R.F. Weinberg, B. Xu et al. (2023)- Formation of giant copper deposits in Tibet driven by tearing of the subducted Indian plate. Earth-Science Reviews 243, 104482, p. 1-11.
(Common Miocene giant to large porphyry copper deposits in Tibet. Inversion of gravity, magnetotelluric and geochemical data show subducted Indian continental lithosphere was torn into several pieces, with different subduction angles during Cenozoic India-Asia collision. Tears in Indian slab provide channels for asthenospheric upwelling, which reworks overlying Asian lithosphere and triggers melting, generating ultrapotassic mafic melts that ascend and pond at base of crust, generating hydrous granitoid magmas. Three key factors generate collision-related PCDs: torn slab subducted at moderate angle, prior fertilization of lower crust with Cu, and trans-lithospheric vertical structures for magma ascent)

Hou, Z. & H. Zhang (2015)- Geodynamics and metallogeny of the eastern Tethyan metallogenic domain. Ore Geology Reviews 70, p. 346-384.
(online at: https://www.sciencedirect.com/science/article/pii/S0169136814002777
(Major review of metallogeny of eastern Tethysides orogenic belt from Turkey to SE Asia, incl. SE Asia and Tengchong-Lianghe Sn-W belts, etc.)

Houseman, G. & P. England (1993)- Crustal thickening versus lateral expulsion in the Indian-Asian continental collision. J. of Geophysical Research 98, B7, p. 12233-12249.
(Since beginning of continental collision between India and Asia ~2500 km of convergence. N-ward movement of India accommodated by major internal deformation of Asian lithosphere, incl. crustal thickening in and around Tibetan Plateau. Experimental modeling suggests crustal thickening dominant mode of indentation strain accommodation. Although common 10- 30° paleomagnetic rotations, probably not accompanied by large Eastward 'extrusion')

Hsu, K.J., J. Li, H. Chen, Q. Wang, S. Sun & A.M.C Sengor (1990)- Tectonics of South China: key to understanding West Pacific geology. Tectonophysics 183, p. 9-39.
(S China is composite of Proterozoic-Mesozoic orogenic belts. Three continental blocks: Yangzi, Huanan, and Dongnanya. Yangzi separated from Gondwana in Late Precambrian. N margin of Huanan was N active Gondwana margin until Devonian. Huanan and Yangzi collided in Triassic. Huanan separated in Devonian, with continuous Devonian-Triassic sequence on S passive margin of Huanan. Dongnanya with Permian glacial marine deposits, separated from Gondwana in Late Permian and may be E continuation of Sibumasu)

Hua, Y., D. Zhao & Y.G. Xu (2022)- Azimuthal anisotropy tomography of the Southeast Asia subduction system. J. of Geophysical Research: Solid Earth 127, 2, e2021JB022854, p. 1-21.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/pdf/10.1029/2021JB022854)
(3-D tomographic model of P wave isotropic velocity and azimuthal anisotropy beneath SE Asia shows high-velocity subducting Australian slab penetrated through mantle transition zone and reached depth of ~1200 km beneath Sumatra, but trapped within MTZ beneath Java. Hainan mantle plume significant low-V anomaly beneath MTZ, extending down to bottom of model (~1600-km depth). Coexistence of mantle plume and stagnant slab may have caused complex tectonic history and geological features in SE Asia (e.g. arc and back-arc volcanoes, intraplate volcanism, and widespread Cenozoic basalts)

Huang, W., D.J.J. van Hinsbergen, P.C. Lippert, Z. Guo & G. Dupont-Nivet (2015)- Paleomagnetic tests of tectonic reconstructions of the India-Asia collision zone. Geophysical Research Letters 42, 8, p. 2642-2649.
(Late Cretaceous and Paleogene paleolatitudes of Tibetan Himalaya difficult to reconcile with current hypotheses of collision age (34, 52 or 65 Ma) and inferred Asian shortening (600-900km))

Huang, W.Q., J.Y. Pan, P. Ni, J.G. Zhou, T. Shui, H. Chen, M.S. Fan & J.M. Cui (2024)- Recognition of Neogene tin mineralization in the Southeast Asian tin belt. Geological Society of America (GSA) Bull. 136, 11-12, p. 5300-5312.
(SE Asian tin belt prolonged mineralization history from Permian to Paleogene (~285-45 Ma). Tin typically associated with subduction and collision of Paleo-Tethys, Meso-Tethys and Neo-Tethys slabs. However, E Miocene cassiterite (21-19 Ma) in Yunling, W Yunnan; youngest tin mineralization in SE Asia tin belt. Sn mineralization possibly linked to extensive lithospheric delamination of lithosphere in SE Tibet, leading to upwelling and decompression partial melting of asthenosphere, providing explanation for high T required for release of Sn from biotite-dehydration melting of sedimentary protolith)

Huang, Z.C., D.P. Zhao & L. Wang (2015)- P wave tomography and anisotropy beneath Southeast Asia: insight into mantle dynamics. J. of Geophysical Research: Solid Earth 120, 7, p. 5154-5174.
(online at: http://onlinelibrary.wiley.com/doi/10.1002/2015JB012098/epdf)
(Tomographic images of mantle under SE Asia show high-velocity zones high-V zones around SE Asia which generally represent subducting slabs. Slabs generally extend down to the Mantle Transition Zone. Low-velocity zones with trench-normal anisotropy in uppermost mantle, indicating back-arc spreading or secondary mantle-wedge flow induced by slab subduction. Trench-parallel anisotropy in deep upper mantle reflects structures in subducting slab or in upper mantle surrounding slab. Gap in slab under area between Sumatra and Java)

Hutchison, C.S. (2005)- The geological framework. In: A. Gupta (ed.) The physical geography of Southeast Asia, Oxford University Press, p. 3-23.
(Review of SE Asia tectonic framework)

Isbell, J.L., M.F. Miller, K.L. Wolfe & P.A. Lenaker (2003)- Timing of late Paleozoic glaciation in Gondwana: was glaciation responsible of the development of northern hemisphere cyclothems? In: M.A Chan & A.W. Archer (eds.) Extreme depositional environments: mega end members in geologic time, Geological Society of America (GSA), Special Paper 370, p. 5-24.

Izokh, E.P. (1997)- Australasian tektites and a global disaster of about 10,000 years BP, caused by collision of the Earth with a comet. Russian Geology Geophysics 38, 3, p. 669-699.
(Based on evidence from Vietnam, age of gigantic Australasian Tektite Strewn Field here considered to be close to 10,000 years ago, much younger than commonly accepted age of 0.7 Ma (very unlikely; JTvG), and may have triggered global climate changes and mass extinctions at Pleistocene/Holocene boundary)

Jagoutz, O., F.A. MacDonald & L. Royden (2016)- Low-latitude arc-continent collision as a driver for global cooling. Proc. National Academy of Sciences USA (PNAS) 113 (18), p. 4935-4940.
(online at: https://www.pnas.org/doi/full/10.1073/pnas.1523667113)

(New constraints on tectonic evolution of Neo-Tethys Ocean indicate that at ~90-70 Ma and at ~50-40 Ma, vast quantities of mafic and ultramafic rocks were emplaced at low latitude onto continental crust within tropical humid belt. These events correspond with, and are potential agents for, global climatic cooling events that terminated Cretaceous Thermal Maximum and E Eocene Climatic Optimum. Obducted rocks (mafic/ultramafic) and tropical humid climate with high precipitation rate result in significant consumption of CO_2)

Jagoutz, O., L. Royden, A.F. Holt & T.W. Becker (2015)- Anomalously fast convergence of India and Eurasia caused by double subduction. Nature Geoscience 8, p. 475-478.
(online at: https://www.researchgate.net/publication/275830959_Anomalously_fast_convergence_of_India_and_Eurasia_caused_by_double_subduction)
(Before collision with Eurasia, Indian Plate moved rapidly N, at rates >140 mm/yr for 20 Myrs (50-100% faster than rates of convergence of main tectonic plates today). Geological data support existence of two, almost parallel, N-dipping subduction zones between Indian and Eurasian plates during E Cretaceous, generating anomalously rapid convergence: (1) N arc along S margin of Eurasia (Karakoram-Gangdese Arc, etc; ~20°-25° N.) and (2) Trans-Tethyan subduction system (Kohistan-Ladakh Arc, ophiolites of Tsangpo suture, etc.), formed near Equator). Threefold increase in plate convergence rate between 80- 65 Ma (Late Cretaceous). Rapid convergence ended at ~50 Ma when Indian Plate collided with southern subduction system (Kohistan Arc); collision of India with Eurasia and N subduction system little effect on plate convergence rates)

Jenny, C. & G. Stampfli (2000)- Permian palaeogeography of the Tethyan Realm. Permophiles 37, p. 24-33.
(Well-illustrated series of Tethys reconstructions for Late Carboniferous- Late Permian, showing generally accepted model of Paleozoic ocean N of Cimmerian continents (Paleotethys), a Late Paleozoic- Mesozoic ocean S of this continent (Neotethys; = Mesotethys of other authors?;JTvG), and M Jurassic ocean (Alpine Tethys))

Jin, X.C. & W.J. Xiao (2017)- Development of the Asian Tethyan Realm. Int. J. Earth Sciences (Geologische Rundschau) 106, p. 1177-1180.
(Introduction to papers from IGCP-589 Symposia in Philippines (2013) and Iran (2014), 120 years after E. Suess coined the concept of the ancient Tethys Ocean, the remnants of which are in Tethysides, a superorogenic complex stretching from S Europe to S and E Asia)

Jin, X.C. & X.N. Yang (2004)- Paleogeographic implications of the *Shanita-Hemigordius* fauna (Permian foraminifer) in the reconstruction of Permian Tethys. Episodes 27, 4, p. 273-278.
(online at: www.episodes.co.in/www/backissues/274/273-278%20Jin.pdf)
(Permian foraminifer Shanita of special paleobiogeographic importance. Occurs in Gondwana-derived blocks, in strip from Peninsular Thailand to Burma, S China, S Afghanistan, Oman, etc. to Turkey. Often associated with Hemigordius. Shanita-Hemigordius fauna considered as marker of marginal Gondwana environment (more specifically 'Cimmerian' strips that rifted off Gondwana in M-L Permian?; JTvG))

Jin, X.C. & K. Zhao (2001)- Permo-Triassic paleogeographic, paleoclimatic and paleoceanographic evolutions in eastern Tethys and their coupling. Science in China, D, 44, 11, p. 968-978.
(Reconstructions of paleogeography and paleoceanography of Chihsian (E Permian), Wuchapingian, Anisian and Norian (Late Triassic) intervals in E Tethys. Paleogeographic change of E Tethys and N-ward shift of Pangea during Permo-Triassic periods governed coeval paleocurrent pattern and evolution)

Jolivet, L., C. Faccenna, T. Becker, M. Tesauro, P. Sternai & P. Bouilhol (2018)- Mantle flow and deforming continents: from India-Asia convergence to Pacific subduction. Tectonics 37, p. 2887-2914.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2018TC005036)
(Tectonic and kinematic records of last 50 Ma with seismic tomography and anisotropy models suggest closure of Tethys Ocean and extensional deformation of E Asia best explained if asthenospheric mantle transporting India N-ward reaches East Asia, where it overrides W-flowing Pacific mantle and contributes to subduction dynamics, distributing extensional deformation over 3000-km wide region)

Jones, P.J., I. Metcalfe, B.A. Engel, G. Playford, J. Rigby, J. Roberts, S. Turner & G.E. Webb (2000)- Carboniferous palaeobiogeography of Australasia. In: A.J. Wright (ed.) Palaeobiogeogeography of Australasia, Memoir Assoc. Australasian Palaeontologists (AAP) 23, p. 259-286.
(Mainly on Carboniferous biostratigraphy of Australian region and Australian-derived SE Asia terranes)

Jourdan, F., S. Nomade, M.T. D. Wingate, E. Eroglu & A. Deino (2019). Ultraprecise age and formation temperature of the Australasian tektites constrained by 40Ar/39Ar analyses. Meteoritics & Planetary Science 54, 10 p. 2573-2591
(online at: https://onlinelibrary.wiley.com/doi/pdf/10.1111/maps.13305)
(New high-precision 40Ar/39Ar age data from tektites from Thailand, China, Vietnam, and Australia ('Australasian' impact event in Indochina), combined with published 40Ar/39Ar data yield a weighted mean age of 788.1 ±- 3.0 ka. Minimum T of formation of Thai tektite between 2350 °C and 3950 °C)

Kanmera, K. & K. Nakazawa (1973)- Permian- Triassic relationship and faunal changes in the eastern Tethys. Canadian Society of Petroleum Geologists, Memoir 2, p. 100-119.
(Audley-Charles et al. 1979: Permian Maubisse Fm of Timor close affinities with Asian facies and faunas)

Kasuya, A., Y. Isozaki & H. Igo (2012)- Constraining paleo-latitude of a biogeographic boundary in mid-Panthalassa: fusuline province shift on the Late Guadalupian (Permian) migrating seamount. Gondwana Research 21, p. 611-623.
(Using Permian fusulinid forams and paleomagnetic data to reconstruct low latitude origin of M Permian seamount, which accreted to S China (Japan) margin in Jurassic. Two or three coeval M Permian biogeographic territories in Tethys-Panthalassa realms: Neoschwagerina-Yabeina territory (>12 °S), Colania-Lepidolina territory (<12°), and higher latitude Eopolydiexodina territory (>~25°S))

Kato, H., A. Reedman, Y. Shimazaki et al. (eds.) (2016)- Stone heritage of East and Southeast Asia. Geol. Survey of Japan and CCOP, Thailand, p. 1-234.
(online at: www.ccop.or.th/download/pub/ccop_stone_book_low_res.pdf)
(Examples of use of natural stone in construction of temples, monuments, castles, forts, etc., in nine SE Asian countries. Incl. chapter on Indonesia by S. Baskoro (not much detail on rock types and nothing on West Papua/PNG, where stone culture persisted until very recently)

Kennett, J.P., G. Keller & M. Srinivasan (1985)- Miocene planktonic foraminiferal biogeography and paleoceanographic development of the Indo-Pacific region. In: J.P. Kennett (ed.) The Miocene ocean: paleooceanography and biogeography, Geological Society of America (GSA) Memoir 163, p. 197-236.
(Planktonic foraminifera distribution patterns suggest closure of Indonesian Seaway around 13-12 Ma)

Khan, P.K., S. Shamim, M. Mohanty, P. Kumar & J. Banerjee (2017)- Myanmar-Andaman-Sumatra subduction margin revisited: insights of arc-specific deformations. J. of Earth Science (China) 28, 4, p. 683-694.
(online at: http://en.earth-science.net/PDF/20170721111758.pdf)
(Analysis of concave and convex sectors of subducting Indian Ocean plate along >3000km long Myanmar-Andaman-Sumatra active margin from earthquake data)

Kiessling W., E. Flugel & J. Golonka (1999)- Paleoreef maps: evaluation of a comprehensive database on Phanerozoic reefs. American Assoc. Petroleum Geol. (AAPG) Bull. 83, 10, p. 1552-1587.

Kiessling W., E. Flugel & J. Golonka (2003)- Patterns of Phanerozoic carbonate platform sedimentation. Lethaia 36, 3, p. 195-225.
(Review of carbonate platforms and distribution from Ordovician-Neogene)

Kimura, T. (1984)- Mesozoic floras of East and Southeast Asia, with a short note on the Cenozoic floras of Southeast Asia and China. In: T. Kobayashi et al. (eds.) Geology and Palaeontology of Southeast Asia 25, University of Tokyo Press, p. 325-350.

(Review of Triassic- Cretaceous floras in SE Asia and China. Late Triassic- E Jurassic flora from Krusin Fm near Kuching. W Sarawak is part of Indochina/ South China Dictyophyllum-Chlathropteris floristic province)

Kimura, T. (1985)- Notes on the present status of Late Triassic floras in East and Southeast Asia. Proc. III Congres Latino America Paleontology, Mexico City, Simposium sobre Floras Trias, Memoir 3, p. 5-9.

Kimura, T. (1987)- Geographical distribution of Paleozoic and Mesozoic plants in East and Southeast Asia. In: A. Taira & M. Tashiro (eds.) Historical biogeography and plate tectonic evolution of Japan and Eastern Asia, Terra Science Publishers, Tokyo, p. 135-200.

Kirillova, G.L. (1993)- Types of Cenozoic sedimentary basins of the East Asia and Pacific Ocean junction area. Palaeogeogr. Palaeoclim. Palaeoecology 105, p. 17-32.
(Classification of marginal basins in W Pacific (incl. Philippine Sea, E China Sea, etc.): (1) oceanic and transitional crust basins: mainly deep water trenches, back-arc, inter-arc, forearc and intra-arc basins; (2) basins with continental crust: marginal-continental shelf and intracontinental basins, filled with alluvial deltaic and lacustrine sediments up to 11 km thick)

Klimetz, M.P. (1987)- The Mesozoic tectonostratigraphic terranes and accretionary heritage of south-eastern mainland Asia. In: E.G. Leitch & E. Scheibner (eds.) Terrane accretion and orogenic belts, American Geophysical Union (AGU) Geodynamics Series 19, p. 221-234.
(On mainland SE Asia tectonic terranes, with focus on Mesozoic accretionary history of China)

Kobayashi, F. (1997)- Middle Permian biogeography based on fusulinacean faunas In: C.A. Ross et al. (eds.) Late Paleozoic foraminifera, their biostratigraphy, evolution and paleoecology, and the Mid-Carboniferous boundary, Cushman Foundation Foraminiferal Research, Special Publ. 36, p. 73-76.
(Permian fusuline foram faunas three provinces: (A) Western Tethys, with Yabeina, Afghanella and Sumatrina and without Lepidolina; extends from Mediterranean to N Arabia; (B) Eastern Tethys, with diverse neoschwagerinids and verbeekinids, incl. Afghanella and Sumatrina, covering SE Asia, S China, Indochina, and limestone units in SW Japan Permian accretionary complex; (C) Panthalassan: without sumatrinids, dominant Yabeina and less Lepidolina, in exotic limestone blocks around Circum-Pacific (N America, Siberia, Japan))

Kobayashi, F. (1997)- Middle Permian fusulinacean faunas and paleobiogeography of exotic terranes in the Circum-Pacific. In: C.A. Ross et al. (eds.) Late Paleozoic foraminifera, their biostratigraphy, evolution and paleoecology, and the Mid-Carboniferous boundary, Cushman Foundation Foraminiferal Research, Special Publ. 36, p. 77-80.

Kobayashi, F. (1999)- Tethyan uppermost Permian (Dzhulfian and Dorashamian) foraminiferal faunas and their paleogeographic and tectonic implications. Palaeogeogr. Palaeoclim. Palaeoecology 150, p. 279-307.
(Latest Permian Palaeofusulina fauna serves as paleogeographic constraints on E and SE Asian terranes. Common in S China, Indochina and E Malaya shelf limestone facies. Also present on Early Permian rifted terranes, like N Thailand (Sibumasu terrane) and Tibet (Qiangtang Terrane). Absence of Palaeofusulina fauna and presence of late Midian Lepidolina multiseptata faunas in Lhasa Terrane (Tibet) and Woyla Terrane in Sumatra important for identifying rift-drift-collision process of Gondwana-affinity terranes)

Kobayashi, T. (1944)- Reciprocal development of radiolarian rocks as between Asiatic and Australian sides. Proc. Imperial Academy (Tokyo) 20, 4, p. 234-238.
(online at: https://www.jstage.jst.go.jp/article/pjab1912/20/4/20_4_234/_pdf)
(Brief review of radiolarian bearing formations in Japan, SE Asia, Australia. Sambosan and Higashigawa suites of Japan mainly Permo-Triassic age. Also in chert series in Malay Peninsula, Tuhur Fm of Sumatra and Danau Fm in Borneo. Danau Fm suggested by Hinde to be Jurassic age, but here thought to be mostly Permo-Triassic (based on Krekeler observations). Danau facies appears continues into Philippines via Palawan and Jolo or Sulu arcs, where radiolarian cherts are called Babuyan Fm)

Kobayashi, T. (1973)- The early stage of the Burmese-Malayan Geosyncline. In: B.K. Tan (ed.) Proc. Regional Conference on the Geology of SE Asia, Kuala Lumpur 1972, Bull. Geological Society Malaysia 6, p. 118-129.
(online at: www.gsm.org.my/products/702001-101351-PDF.pdf)
(Discussion of belt of Paleozoic (Ordovician- Permian) and Triassic rocks, extending from Shan Plateau (Myanmar) and W Yunnan (S China) in N, through Thai-Malayan Peninsula in south and continuing into Borneo. No figures, maps)

Kobayashi, T. & M. Tamura (1983)- On the Oriental Province of the Tethyan Realm in the Triassic period. Proc. of the Japan Academy, Ser. B, 59, 7, 47, p. 203-206.
(online at: https://www.jstage.jst.go.jp/article/pjab1977/59/7/59_7_203/_pdf/-char/en)
(Short paper on provinciality in Triassic bivalves. In addition to cosmopolitans, many Triassic bivalve genera are distributed from Alps to China, Indochina and USSR. Oriental Province of Tethys with species indigenous to E and SE Asia. Stretches from Kashmir, Burma, S China, Malay Peninsula, to E Indonesia)

Kong, F., R. Gao, S.S. Gao, K.H. Liu, W. Ding, X. Niu, A. Ruan, P. Tan, J. Fan et al. (2023)- Mantle flow underneath the South China Sea revealed by seismic anisotropy. National Science Review (China) 10, 10, nwad176, p. 1-8.
(online at: https://academic.oup.com/nsr/article/10/10/nwad176/7199670)
(Shear wave splitting analyses datas from OBS array deployed in-2019-2020 in South China Sea (SCS) points to mantle flow in NNW–SSE orientation, which can be attributed to mantle flow extruded from Tibetan Plateau by the ongoing Indian–Eurasian collision. E-W oriented flow fields observed in South China and Indochina Peninsula do not extend to central SCS)

Konyukhov, A.I. (2009)- Geological structure, sedimentation conditions, and petroleum potential of sedimentary basins in Southeast Asia. Lithology and Mineral Resources 44, 5, p. 427-440.
(Russian review of SE Asian basins. Most sedimentary basins of SE Asia related to processes of rifting that activated in Paleo-Eocene after consolidation of continental crust of the Sunda (Malay) microplate, which ended in Late Cretaceous. Wide development of lacustrine basins, which accumulated main source rocks for oil and gas in region)

Kozur, H. (1973)- Faunenprovinzen in der Trias und ihre Bedeutung fur die Klarung der Paleogeographie. Geologische Palaontologische Mitteilungen Innsbruck 3, 8, p. 1-41.
(online at: www2.uibk.ac.at/downloads/c715/gpm_03/03_08_001-041.pdf)
('Faunal provinces in the Triassic and their significance for paleogeography'. Paleobiogeography based mainly on conodonts biogeography. Triassic of SE Asia (incl. Timor) is in Asiatic Tethyan faunal province. No maps)

Kristan-Tollmann, E. (1987)- Triassic of the Tethys and its relations with the Triassic of the Pacific realm. In: K.G. MacKenzie (ed.) Int. Symposium on Shallow Tethys 2, Wagga Wagga, Balkema, Rotterdam, p. 169-186.

Kristan-Tollmann, E. (1988)- Unexpected microfaunal communities within the Triassic Tethys. In: M.G. Audley-Charles & A. Hallam (eds.) Gondwana and Tethys, Geological Society, London, Special Publ. 37, p. 213-223.
(Remarkable uniformity in Triassic faunas throughout Tethyan region. Both planktonic and benthic organisms. Very little on SE Asia)

Kristan-Tollmann, E. (1988)- Pandemic ostracod communities in the Tethyan Triassic. In: R. Whatley & C. Maybury (eds.) Ostrocoda and global events, British Micropal. Soc. Publ., p. 541-544.
(Tethyan Late Triassic ostracodes in Sahul Shoals 1 well, 1880-1890m, Australia NW Shelf. Most common species Cytherella acuta, with other Tethyan species Nodobairdia mammilata and Tethyscythere austriaca. Similar Triassic ostracode faunas on N and S sides of Tethys (Timor, NW Australia))

Krobicki, M. & J. Golonka (2006)- Caledonian orogeny in Southeast Asia: questions and problems. Geolines, 20, p. 75-78. *(Extended Abstract)*
(online at: http://geolines.gli.cas.cz/fileadmin/volumes/volume20/G20-076.pdf)

Krobicki, M. & J. Golonka (2009)- Palaeobiogeography of Early Jurassic *Lithiotis*-type bivalve buildups as recovery effect after Triassic/Jurassic mass extinction and their connections with Asian palaeogeography. Proc. 5th Internationl Symposium of IGCP-516, Geological anatomy of East and South Asia, Kunming, Acta Geoscientica Sinica 30, Suppl. 1, p. 30-33.
(online at: www.cagsbulletin.com/)
(Buildups of large bivalves of Lithiotis group molluscs are first reefal features after end-Triassic extinction. Present across S Tethys margin, including Nepal-Tibet (Lhasa Block?) and Timor (Krumbeck 1923))

Lacassin, R., P.H. Leloup & P. Tapponnier (1993)- Bounds on strain in large Tertiary shear zones of SE Asia from boudinage restoration. J. Structural Geology 15, p. 677-692.
(Restoration of stretched, boudinaged layers in mylonitic gneisses of Oligo-Miocene Red River-Ailao Shan (Yunnan) and Wang Chao (Thailand) shear zones suggests layer-parallel extension of 250-870%, implying minimum left-lateral strike-slip displacements of ~330 km (Red River-Ailao Shan) and ~35 km (Wang Chao))

Lai, C.K., S. Meffre, A.J. Crawford, K. Zaw, C.D. Xue & J.A. Halpin (2014)- The Western Ailaoshan volcanic belts and their SE Asia connection: a new tectonic model for the Eastern Indochina Block. Gondwana Research 26, p. 52-74.
(W Ailaoshan volcanic belts mark western boundary of S China-Indochina Suture along Ailaoshan Fold Belt. Multiple phases of Late Carboniferous- Permian arc/ backarc magmatism and Late Permian- E. Triassic syn- and post-collisional magmatism. With new plate geodynamic evolution model from 440-210 Ma))

Langford, R.P., B. Cairncross & M. Friedrich (1992)- Permian coal and palaeogeography of Gondwana. Bureau Mineral Resources Geology Geophysics, Canberra, Record 1991/95, Palaeogeography 39, p. 1-136.
(online at: www.ga.gov.au/corporate_data/14505/Rec1991_095.pdf)
(Review of Early and Late Permian coal distribution across Gondwana (Australia- W Papua, India, Antarctica, etc.). Coal deposition mainly in paleolatitudes from ~45° S to 75° S, representing cold to cool temperate climate with high precipitation, ideal for peat swamp development (Permian equatorial peat swamp coal deposits in Cathaysia not discussed). Most prolific period of coal deposition late E Permian, during climatic amelioriation after glaciation (No details on thin Permian coals of West Papua))

Laveine, J.P., B. Ratanasthien & A.H. Hussin (1999)- The Carboniferous floras of Southeast Asia: implications for the relationships and timing of accretion of some Southeast Asian blocks. In: I. Metcalfe (ed.) Gondwana dispersion and Asian accretion, IGCP 321 Final Results Volume, Balkema, Rotterdam, p. 229-246.
(Carboniferous flora of E Peninsular Malysia ('Kuantan flora' of Asama) and NE Thailand typical Euramerican aspect, suggesting Indo-China Block was in terrestrial connection with N Paleotethyan landmass, probably S China Block since at least E Carboniferous. E Malaya Block also part of North Paleotethyan domain)

Laveine, J.P., S. Zhang & Y. Lemoigne (2000)- Palaeophytogeography and palaeogeography, on the basis of examples from the Carboniferous. Revue de Paleobiologie, Geneve 19, 2, p. 409-425.

Laveine, J.P., S. Zhang, Y. Lemoigne & B. Ratanasthien (1999)- Paleogeography of East and Southeast Asia during Carboniferous times on the basis of paleobotanical information: some methodological comments and additional results. In: B. Ratanasthien & S.L. Rieb (eds.) Proc. Int. Symposium Shallow Tethys (ST) 5, Chiang Mai 1999, Dept. of Geological Science, Chiang Mai University, p. 55-72 *(ST5 book online at: https://library.dmr.go.th/elib/cgi-bin/opacexe.exe?op=mmvw&db=Main&skin=S&mmid=19206&bid=17374)*
(Review of Carboniferous paleofloras in E and SE Asia)

Le Fort, P., M. Colchen & C. Montenat (eds.) (1986)- Evolution des domaines orogeniques d'Asie meridionale (de la Turquie a l'Indonesie). Livre jubilaire en l'honneur de Pierre Bordet, Memoires Sciences de la Terre 47, Fondation Scientifique de la geologie et de ses application, Nancy, p. 1-429.
('Evolution of the orogenic domains of southern Asia (from Turkey to Indonesia): volume in honor of Pierre Bordet')

Le Pichon, X., M. Fournier & L. Jolivet (1992)- Kinematics, topography, shortening, and extrusion in the India-Eurasia collision. Tectonics 11, p. 1085-1098.
(Spatial distribution of topography in Greater India- Eurasia suggest transfer of lower crust to mantle by eclogitization and lateral extrusion account for minimum of one third/ one half of total amount of shortening between India -Asia since 45 Ma)

Li, C. & R. van Der Hilst (2010)- Structure of the upper mantle and transition zone beneath Southeast Asia from traveltime tomography structure of the upper mantle and transition zone beneath Southeast Asia from traveltime tomography. J. of Geophysical Research: Solid Earth 115, B07308, p. 1-19.
(online at: http://onlinelibrary.wiley.com/doi/10.1029/2009JB006882/epdf)
(Tomographic sections mainly in area of India-Asia collision and China margin)

Li, C., R.D. van der Hilst, E.R. Engdahl & S. Burdick (2008)- A new global model for P wave speed variations in Earth's mantle: Geochem. Geophysics Geosystems 9, 5, Q05018, p. 1-21.
(online at: http://onlinelibrary.wiley.com/doi/10.1029/2007GC001806/epdf)
(Include examples of tomography sections across Indonesia))

Li, C., R.D. van der Hilst & M.N. Toksoz (2006)- Constraining P-wave velocity variations in the upper mantle beneath Southeast Asia. Physics Earth Planetary Interiors 154, 2, p. 180-195.
(Tomographic inversions reveal high-velocity roots beneath Archean Ordos Plateau, Sichuan Basin and other continental blocks in SE Asia. Beneath Himalayan Block high velocities, associated with subduction of Indian lithospheric mantle, visible above 410 km discontinuity, and may not connect to remnant of Neo-Tethys oceanic slab in lower mantle. Only SW part of Tibetan plateau underlain by Indian lithosphere)

Li, C.F. & J. Wang (2016)- Variations in Moho and Curie depths and heat flow in Eastern and Southeastern Asia. Marine Geophysical Research 37, 1, p. 1-20.
(Oldest continental and oceanic domains (N China craton, Pacific and Indian Ocean) thermally perturbed by events probably linked to small-scale convection or serpentinization in mantle and volcanic seamounts and ridges. W Philippine Sea Basin anomalously small Curie depths. W Pacific marginal seas have lowest Moho temperature; contrary in most parts of easternmost Eurasian continent.Magmatic processes feeding Permian Emeishan large igneous province along plate boundary may be caused by tectonic processes along plate margins, rather than by deep mantle plume)

Li, J., W. Ding, J. Lin, Y. Xu, F. Kong, S. Li, X. Huang & Z. Zhou (2021)- Dynamic processes of the curved subduction system in Southeast Asia: a review and future perspective. Earth-Science Reviews 217, 8, 103647, p. 1-15.
(online at: https://www.sciencedirect.com/journal/earth-science-reviews/vol/217/suppl/C)
(SE Asia surrounded by inward subduction systems on three sides, largest and most complicated curved convergent subduction system on Earth. Review of mechanisms of evolution of ring-shape subduction systems)

Li, N., W. Yang, L. Zhu, L. Xie, Y. Zhong, Y. Mai, Y. Zhou & H. Zhang (2022)- Permian arc magmatism in southern Tibet: implications for the subduction and accretion of the Zhikong-Sumdo Paleo-Tethys Ocean. Gondwana Research 111, 4, p. 265-279.
(online at: https://www.researchgate.net/publication/363355170_Permian_arc_magmatism_in_southern_Tibet_Implications_for_the_subduction_and_accretion_of_the_Zhikong-Sumdo_Paleo-Tethys_Ocean)
(Zhangda complex in Lhasa Block composed of gabbro, gabbro diorite, and tonalite. Zircon U-Pb ages 258-281 Ma (late E- M Permian). Tied to N-ward subduction/accretion of Zhikong- Sumdo Ocean under Lhasa block)

Li, P., Gao Rui, J. Cui & Guan Ye (2004)- Paleomagnetic analysis of eastern Tibet: implications for the collisional and amalgamation history of the Three Rivers Region, SW China. J. Asian Earth Sciences 24, p. 291-310.
(Analysis of paleolatitudes and latitudinal displacements for S China, Simao, Baoshan, Shan-Thai, Indochina, Qiangtang, Lhasa and Himalayan blocks: (1) Simao Block S China-derived; (2) Baoshan and Shan-Thai blocks rapid N drift from Late Carboniferous- Late Permian; (3) Baoshan Block collided with Simao Block in Late

Permian and continued to drift N, together with S China and Shan-Thai blocks until Late Triassic; (4) Paleo-Tethys separating Baoshan and Simao blocks possibly opened in E Silurian; (5) Meso-Tethys ranged in age from E Permian- E Cretaceous, and reached greatest width of ~42° latitude in Late Triassic)

Li, S., E. Advokaat, D.J.J. van Hinsbergen, M. Koymans, C. Deng & R. Zhu (2017)- Paleomagnetic constraints on the Mesozoic-Cenozoic paleolatitudinal and rotational history of Indochina and South China: review and updated kinematic reconstruction. Earth-Science Reviews 171, p. 58-77.
(online at: https://www.geologist.nl/wp-content/uploads/2017/05/2017_Li_ESR.pdf)
(Review of paleomagnetic data suggests (1) no significant rotations of S China Block relative to Eurasia since latest Jurassic; (2) No paleomagnetically resolvable S-ward motion of Indochina Block (inclinations lower than expected, probably due to inclination shallowing in sediments; (3) large rotating blocks in N Indochina and SE Tibetan margin (up to 70° CW), more than ~10-15° rotation of stable SE Indochina Block. Blocks bounded by fold-thrust belts and strike-slip faults, accommodating Cenozoic block rotations. NW part of Indochina extruded 350 km more along Ailao Shan-Red River fault than SE part, accommodated by internal NW Indochina rotation and deformation. 250 km of extrusion of SE part of Indochina)

Li, S., B.M. Jahn, S. Zhao, L. Dai, X. Li, Y. Suo, L. Guo, Y.M. Wang et al. (2017)- Triassic southeastward subduction of North China Block to South China Block: insights from new geological, geophysical and geochemical data. Earth-Science Reviews 166, p. 270-285.
(Subduction prior to assembly of S China and N China blocks traditionally considered directed N-ward, but new tectonic model suggests SE ward subduction of N China under S China. S margin of N China Block passive margin in Triassic, without arc magmatism, etc. Suture lateral subduction zone rather than collision zone)

Li, X.M., X.D. Wang, L, Yao, Y.C. Zhang & X.J. Wang (2022)- Permian rugose coral *Thomasiphyllum* as a paleogeographical indicator of the Gondwana-derived Cimmerian continent. J. Asian Earth Sciences 228, 105146, p. 1-8.
(Solitary rugose coral Thomasiphyllum with 10 species occurs in M Permian carbonates in SE Iran, C Tibet, SW Yunnan (with Eopolydiexodina-Sumatrina-Verbeekina fusulinid assemblage), C Myanmar, W Thailand and W Sumatra. All belong to Cimmerian continent which rifted from N Gondwana (incl. Lhasa, Tengchong, and Sibuma), and located at subtropical latitudes during M Permian. In Indonesia known from Lake Singkarak, Sumatra (20 species formerly assigned to Thomasiphyllum from S China do not belong in genus))

Li, X.Q., H.W. Peng, K.L. Xiang, X.G. Xiang, F. Jabbour, R. del C. Ortiz, P.S. Soltis, D.E. Soltis & W Wang (2024)- Phylogenetic evidence clarifies the history of the extrusion of Indochina. Proc. National Academy of Sciences USA (PNAS) 121, 35, e2322527121, p. 1-6.
(online at: https://www.pnas.org/doi/epdf/10.1073/pnas.2322527121)
(SE-ward extrusion of Indochina over ~500- 1,150 km along Ailao Shan- Red River shear zone one of most prominent consequences of India-Asia collision (initially proposed by Tapponnier et al., 1990). Study of 42 plant and animal clades (1,721 species) show lineage divergences across ARSZ, interpreted as associated with Indochinese extrusion, starting at ~53 Ma (E Eocene; 'soft collision')) and accelerated sharply between ~35-16 Ma (latest Eocene- E-M Miocene boundary), peaking at ~19 Ma. Results suggest two-phase extrusion of Indochina, with second episode at 11-5 Ma (Late Miocene))

Li, X.X. (1986)- The mixed Permian Cathaysia-Gondwana flora. The Palaeobotanist 35, 2, p. 211-222.
(online at: http://14.139.63.228:8080/pbrep/bitstream/123456789/1262/1/PbV35N2_211.pdf)
(Mixed Gondwanan- Cathaysian floras from Turkey to Saudi Arabia, Kashmir to Western New Guinea)

Li, X.X. & G.L. Shen (1996)- A brief review of the Permian macrofloras in southeast Asia and their phytological delimitation. J. Southeast Asian Earth Sciences 13, p. 161-170.
(Overview of Permian macrofloras of SE Asia, with map of Permian phytogeographical provinces. Djambi flora of C Sumatra is southernmost Cathaysian flora. New Guinea Permian flora mixed Gondwanan and Cathaysian)

Li, X.X. & X.Y. Wu (1994)- The Cathaysian and Gondwana floras; their contribution to determining the boundary between eastern Gondwana and Laurasia. J. Southeast Asian Earth Sciences 9, 4, p. 309-317.

(Permian floras suggest boundary between E Gondwana and Laurasia runs along Bangongeo-Dengqen suture of Qinghai-Xizang (Tibet) plateau, turns S near Qamdo in E Xizang, then possibly extends through Baoshan District of W. Yunnan to link up with Pham Sore and Bentong-Raub sutures of Thailand- Peninsular Malaysia, from where it continues further S across E Sumatra to Indian Ocean. Jambi flora of Sumatra, Jengka and Linggiu floras of Malaysia and Phetchabun and Loei floras of Thailand all contain elements of Cathaysian flora. W New Guinea Permian floras mixed Cathaysian-Gondwana flora.)

Li, X.X. & X.Y. Wu (1996)- Late Paleozoic phytogeographic provinces in China and its adjacent regions. Review Palaeobotany Palynology 90, p. 41-62.
(Review of Devonian-Permian floral provinces of China. Cathaysian Floral province two major blocks: Sino-Korean-Tarim (N China) and S China Block, both vegetated by Euramerican floras until Late Carboniferous when Cathaysian elements first began to differentiate Two Cathaysian provinces established by Permian. Cathaysian flora developed in tropical, ever-wet climatic zone. Tropical conditions persisted in S China throughout Permian, but in N China, by early Late Permian alternating wet and dry climates, and by late Late Permian most of N Hemisphere in extreme arid conditions. Large leaved forms like Taeniopteris more common in N China and Gigantopteris almost completely restricted to S China. S China also with abundant Psaronius tree ferns and Gleicheniaceous ferns)

Liu, Y., W. Fan, T. Peng, R. Shi, S. Chen & P. Huangfu (2025)- Reconstruction of Cretaceous-Eocene arcs along the southern Asian margin under Neo-Tethyan subduction. Lithos 500-501, 107995, p.
(Late Cretaceous-Eocene extended Neotethyan continental arc formed on S Asian margin from S Lhasa, (Gangdese arc) through Tengchong- Shan Scarps to Sumatra. Magmatism in eastern S Lhasa and Sumatra dominated by juvenile crust growth with flare-ups at 105-85 Ma (late Albian- Turonian) and 65–45 Ma (Paleocene- E Eocene). Magmatic flare-ups at 75-45 Ma and ancient crust reworking recorded in western S Lhasa, Tengchong, and Shan Scraps. Variations in magmatic flare-ups probably related to asynchronous rollback of Neo-Tethyan slab under different sections (Also late Cretaceous-Eocene magmatism in W Burma, (but intra-oceanic arc?) Sumatra, and Sulawesi, similar to those in Gangdese)

Li, Z.X. & C.M. Powell (2001)- An outline of the palaeogeographic evolution of the Australasian region since the beginning of the Neoproterozoic. Earth-Science Reviews 53, p. 237-277.
(Plate reconstructions of Australian region from 1000 Ma- recent)

Li, Z.X., L. Zhang & C.M. Powell (1996)- Positions of the East Asian cratons in the Neoproterozoic supercontinent Rodinia. Australian J. Earth Sciences 43, p. 593-604.
(Three major E Asian crustal blocks (Tarim, N China and S China) have records of the Neoproterozoic rifting events that broke up supercontinent Rodinia. Tarim Block may have been adjacent to Kimberley region, S China Block between E Australia and Laurentia, and N China Block adjacent to NW corner of Laurentia and Siberia during E Neoproterozoic. All three blocks probably separated from larger cratons towards end of Neoproterozoic but stayed close to Australian margins of Gondwanaland from Cambrian-Devonian)

Liao, W.H. (1990)- The biogeographic affinities of East Asian corals. In: W.S. McKerrow and C.R. Scotese (eds.) Palaeozoic biogeography and biogeography, Geological Society, London, Memoir 12, p. 175-179.
(In E Asia tabulate and rugose corals present from E Ordovician- end Permian. Ordovician corals of N China related to Americo-Siberian region; S China close affinity to E Australia in Early Silurian, but more akin to Urals and C Asia in M-L Silurian. E-M Devonian 5 biogeographic provinces in E Asia: (1) Arctic; (2) Junggar-Hinggan; (3) Uralo-Tian Shan; (4) Paleotethys and (5) S China. In E Permian N and S parts of Asia belong to cold-water Lytvolasma fauna, middle part warm-water Tethyan with Iranophyllum/ Ipciphyllum fauna)

Licht, A., G. Dupont-Nivet, J. Westerweel, Zaw Win, A. Guihou, P. Deschamps &, D.W. Aung (2025)- The missing arcs of the India-Asia collision. Gondwana Research 147, p. 260-275.
(Compiliation of detrital zircon ages from NE India, Burma Terrane, and Asian margin to identify age populations that could indicate presence of Trans- (Neo-)Tethyan Arc system. Arrival of allochthonous material onto India is best explained by input from Asian forearc (Xigaze Forearc) alone, without requiring input from additional missing arc. Burma sedimentary record suggestive of missing Cretaceous-Paleogene Trans-Tethyan

Arc arc between Myanmar and Asia, but not required to explain history of Burma Terrane and its detrital zircon record)

Lin, J., Y. Xu, Z. Sun & Z. Zhou (2019)- Mantle upwelling beneath the South China Sea and links to surrounding subduction systems. National Science Review (China) 6, 5, p. 877-881.
(online at: https://academic.oup.com/nsr/article/6/5/877/5555739)
(Evolution of S China Sea directly linked to complex subduction systems of surrounding Pacific, Philippine Sea and Indo-Australian Plates)

Lin, J.L., M. Fuller & W.Y. Zhang (1985)- Paleogeography of the North and South China blocks during the Cambrian. J. Geodynamics 2, p. 91-114.
(Paleomagnetic results show S China block close to equator in Cambrian, probably adjacent to N Australia. This juxtaposes Cambrian marine basins in S China and Australia, explains stratigraphic similarity between late Precambrian Sinian System in S China and Adelaide System in Australia and continuing fossil affinities in Cambrium- Ordovician. Proposed geographic configuration lasted from late Precambrian (800 Ma) - E Ordovician (470 Ma). Paleomag from Cambrian of N China block indicates it was in S Hemisphere, with paleontological evidence suggesting it was close to Tibet, Iran and N India during Paleozoic)

Liou, J.G., W.G. Ernst, R.Y. Zhang, T. Tsujimori, B.M. Jahn (2009)- Ultrahigh-pressure minerals and metamorphic terranes- the view from China. J. Asian Earth Sciences 35, p. 199-231.
(Review of Ultra High-Pressure (UHP) metamorphic terranes in China and adjacent areas. These represent continental and oceanic crustal protoliths which experienced P-T conditions near coesite stability field (>~2.7 GPa and ~700°C). Typical products include eclogite, garnet peridotite, and UHP varieties of metapelite, quartzite, marble, paragneiss and orthogneiss. UHP metamorphic assemblages require relatively cold lithospheric subduction to mantle depths. Includes some data from Indonesia (Sulawesi))

Liu, S., P. Ma, B. Zhang & M. Gurnis (2021)- The horizontal slab beneath East Asia and its subdued surface dynamic response. J. of Geophysical Research: Solid Earth 126, 3, e2020JB021156, p. 1-19.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2020JB021156)
(East Asia (China, Japan, etc.) characterized by unusually large horizontal slab within mantle transition zone. Tectonics and topography of East Asia strongly contrast with SE Asia and reflect slabs ephemerally stagnating in mantle below East Asia while avalanching into lower mantle below SE Asia)

Liu, S., T. Qian, W. Li, G. Dou & P. Wu (2015)- Oblique closure of the northeastern Paleo-Tethys in central China. Tectonics 34, 10.1002/2014TC003784, p. 1-22.
(NE branch of Paleo-Tethys Ocean that separated N China and South China plates closed by oblique collision along two N-dipping suture zones in C China. Shangdan suture developed in Late Paleozoic; Mianlue suture to S in M-L Triassic (collisional sutures obscured by thrust faults in S Qinling-Dabieshan orogen))

Lohman, D.J., M. de Bruyn, T. Page, K. von Rintelen, R. Hall, P.K.L. Ng, H.T. Shih, G.R. Carvalho & T. von Rintelen (2011)- Biogeography of the Indo-Australian Archipelago. Annual Review Ecology Evolution Systematics 42, p. 205-226. *(online at: https://www.researchgate.net/publication/232715269_Biogeography_of_the_Indo-Australian_Archipelago)*
(Extraordinary species richness and endemism in Indo-Australian Archipelago. Present distribution patterns of species shaped largely by pre-Pleistocene dispersal and vicariance events, whereas more recent changes in connectivity of islands in Archipelago influenced partitioning of intraspecific variation)

Longley, I. (2023)- Greater SE Asian frontier exploration potential- 15 untested Billion barrel potential opportunities. SE Asia Petroleum Exploration Society (SEAPEX) 50th Jubilee Convention, Singapore 2023, 148p. *(Abstract + Presentation)*
(Review of untested hydrocarbon opportunities in Indonesia, Malaysia, Vietnam, NW Australia, Taiwan, Indian Andamans, the Philippines and South Korea)

Lu, Z., J. Li, C.F. Li & X. Du (2023)- Tectonic controls on effective elastic thickness of lithospheres around the Southeast Asian subduction zones. Tectonophysics 863, 229994, p. 1-12.
(SE Asia most complicated convergent system on Earth. Estimates of effective elastic thickness Te. Spatial variations of Te coincide with tectonic settings, including oceanic crustal age. Lowest Te (≤10 km) in NE Indian Seamount Province and young oceanic basins. Sunda Shelf relatively low Te (10-20 km), where Cenozoic rifting and extension weakened lithosphere. Molucca Sea and most continental regions show high Te (≥40 km). Low Te (≤ 10 km) N Sumatra and C Java subduction zone consistent with presence of slab tear/window and mantle upwelling. Etc.)

Lunt, P. & X. Luan (2022)- Choosing between a dichotomy of methods in stratigraphy. Geology Today 38, 2, p. 69-74.
(online at: www.researchgate.net/publication/360094966_Choosing_between_a_dichotomy_of_methods Etc.)
(Overview of stratigraphical methods, with examples from tectonically active basins of SE Asia. Largely a critique of perceived excessive-use of eustatic sea level changes and sequence stratigraphic cycle charts in stratigraphic interpretation n SE Asia, and advocating evidence-based over model-driven interpretations)

Lunt, P. & X. Luan (2022)- Towards a formal method in tectono-stratigraphy; using SE Asia's unique dataset. Proc. Asia Petroleum Geoscience Conference and Exhibition (APGCE 2022), Kuala Lumpur, p. 1-5.

Lunt, P. & X. Luan (2023)- Giving names to features in geology; the choice between subjective listing or researching objective natural divisions. Berita Sedimentologi 49, 2, p. 28-55.
(online at: https://journal.iagi.or.id/index.php/FOSI/article/view/429/407)
(Essay on often poor naming practices in SE Asia geology)

Luyendyk, B.P. (1974)- Gondwanaland dispersal and the early formation of the Indian Ocean. In: B.P. Luyendyk & T.A. Davies (eds.) Initial Reports Deep Sea Drilling Project (DSDP), Washington, D.C., 26, p. 945-952.
(online at: www.deepseadrilling.org/26/volume/dsdp26_37.pdf)
(Early paper on formation of Indian Ocean and dispersal of Gondwana pieces towards Asia. Shows Late Jurassic separation of Borneo and Sulawesi from NW Australian margin)

Lynner, C. & M.D. Long (2014)- Sub-slab anisotropy beneath the Sumatra and circum-Pacific subduction zones from source-side shear wave splitting observations. Geochem. Geophysics Geosystems 15, 6, p. 2262-2281.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/pdfdirect/10.1002/2014GC005239)
(Source-side shear wave splitting measurements for C America, Alaska-Aleutians, Sumatra, Ryukyu and Izu-Bonin-Japan-Kurile subduction systems. Trench parallel fast splitting dominant beneath Izu-Bonin, Japan, S Kurile slabs and part of Sumatra system; fast directions paralleling motion of downgoing plate dominant in Ryukyu, C America, N Kurile, W Sumatra and Alaska-Aleutian regions. Older subducting lithosphere (>95 Ma) associated with trench parallel splitting, younger lithosphere with plate motion parallel fast splitting directions)

Mallick, R., E.O. Lindsey, L. Feng, J. Hubbard, P. Banerjee & E.M. Hill (2019)- Active convergence of the India-Burma-Sunda plates revealed by a new continuous GPS network. J. of Geophysical Research: Solid Earth 124, 3, p. 3155-3171.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2018JB016480)
(New GPS data on geometries and slip rates of three major faults that accommodate India-Burma-Sunda plate motion: (1) Rakhine-Bangladesh megathrust, (2) Churachandpur-Mao Fault, and (3) Sagaing Fault. Faults likely fully coupled; modern shortening rate across Burma plate is 12–24 mm/year, while total dextral shear rate is 25-32 mm/year. Megathrust now accumulating strain, eventually being released in earthquakes)

Marcoux, J. & A. Baud (1996)- Late Permian to Late Triassic Tethyan paleoenvironments. Three snapshots: Late Murgabian, Late Anisian, Late Norian. In: X. Nairn et al. (eds.) The Tethys Ocean, Plenum Press, New York, p. 153-190.
(Three paleogeographic reconstructions of Tethys Ocean, from Europe to Australia (similar to maps of Tethys Atlas Project by Dercourt et al., 1993))

Maruyama, S., J.G. Liou & T. Seno (1989)- Mesozoic and Cenozoic evolution of Asia. In: Z. Ben-Avraham (ed.) The evolution of the Pacific Ocean margins, Oxford University Press, Monographs Geology Geophysics 8, p. 75-99.

Maruyama, S., J.G. Liou & M. Terabayashi (1996)- Blueschists and eclogites of the world and their exhumation. International Geology Review 38, 6, p. 485-594.
(Includes brief descriptions of Indonesian (Java, SE Kalimantan, Sulawesi, Timor, N New Guinea) and SW Pacific (E PNG, New Caledonia, etc.) blueschist occurrences)

Maruyama, S., H. Masago, I. Katayama, Y. Iwase, M. Toriumi, S. Omori & K. Aoki (2010)- A new perspective on metamorphism and metamorphic belts. Gondwana Research 18, p. 106-137.
(Includes discussion of ongoing exhumation of continent collision-type metamorphic belt in Timor-Tanimbar region)

Maruyama, S., S. Omori, H. Senshu, K. Kawai & B.F. Windley (2011)- Pacific-type orogens: new concepts and variations in space and time from present to past. J. of Geography (Chigaku Zasshi) 120, p. 115-223.
(online at: www.jstage.jst.go.jp/article/jgeography/120/1/115/_pdf)
(In Japanese with English summary. Overview of Pacific-type active margins, with examples from Indonesia. Show Miocene forearc spreading in Banda outer arc, creating ophiolites that now rest on metamorphic belts from Timor, through Leti-Moa-Sermata to Dai islands, etc.)

Maung, H. (1983)- A new reconstruction of Southeast Asia and Gondwanaland in relation to mantle plumes or hotspots. Proc. SE Asia Petroleum Exploration Society (SEAPEX) 6, p. 66-70.

Mayr, E. (1945)- Wallace's Line in the light of recent zoogeographic studies. The Quarterly Review of Biology 19, 1, p. 1-14. *(online at: http://faculty.jsd.claremont.edu/dmcfarlane/bio176mcfarlane/pdf%20papers/Wallaces%20Line%20_1944.pdf)*
(Wallace's zoogeographic line not boundary between Indo-Malayan and Australian regions, rather the edge of Sunda shelf area. Weber's Line separates islands in W with predominantly Indo-Malayan elements from islands in E with dominantly Australo-Papuan elements)

Mayr, E. (1945)- Wallace's Line in the light of recent zoogeographic studies. In: P. Honig & F. Verdoorn (eds.) Science and scientists in the Netherlands Indies. Board for the Netherlands Indies, Surinam and Curacao, New York, p. 241-250.
(online at: https://archive.org/details/in.ernet.dli.2015.183759)
(Reprint of paper above. The concept of Wallace's Line has been criticized by many subsequent workers)

Mazur, S., C. Green, M.G. Stewart, J.M. Whittaker, S. Williams & R. Bouatmani (2012)- Displacement along the Red River Fault constrained by extension estimates and plate reconstructions. Tectonics 31, 5, TC5008, p. 1-22.
(New plate tectonic interpretations for Greater S China Sea area since 35 Ma, partly constrained by amounts of extension computed from gravity models. Best-fit plate model assumes 250 km of left-lateral displacement along Red River Fault (calculated at Vietnamese coast of Gulf of Tonkin) from 35- 20.5 Ma)

McCabe, R. (1984)- Implications of paleomagnetic data on the collision related bending of island arcs. Tectonics 3, 4, p. 409-428.
(Paleomagnetic studies from C Philippines, Sulawesi, Fiji-New Hebrides, etc., show differences in declination within same arc. Rotated segments of upper plate where buoyant feature on downgoing plate (seamount, continental fragment or island arc) locally deforms margin of upper plate. Stresses resulting from collision may result in (1) strike-slip faults causing sideward extrusion of portions of upper plate; (2) changes in subduction zone polarity; (3) strike-slip faults around margin of indenter; or (4) reorganization of entire plate margin)

McCabe, R. & J. Cole (1987)- Speculations on the Late Mesozoic and Cenozoic evolution of the South East Asian margin. In: M.K. Horn (ed.) Trans. 4th Circum-Pacific Energy and Mineral Resources Conference, Singapore 1986, p. 375-394.
(Sulu, Celebes and Banda Sea marginal basins all have E-W trending magnetic anomalies, progressively younging to North from Cretaceous to Paleogene, therefore believed to be parts of single marginal oceanic basin. With 6 plate reconstruction maps Cretaceous-Miocene (Subsequent work suggests Banda Sea not Cretaceous but Neogene age: JTvG))

McCabe, R. & J. Cole (1989)- Speculations on the Late Mesozoic and Cenozoic evolution of the Southeast Asian margin. In: Z. Ben-Avraham (ed.) The evolution of the Pacific Ocean margins, Oxford Monographs Geology Geophysics 8, Oxford University Press, p. 143-160.
(Same as McCabe and Cole 1987)

McCabe, R., S. Harder, J.T. Cole & E. Lumadyo (1993)- The use of palaeomagnetic studies in understanding the complex Tertiary tectonic history of East and Southeast Asia. In: B.K. Tan et al. (eds.) 7th Regional Congress Geology Mineral Energy Resources of SE Asia (GEOSEA VII), Bangkok 1991, J. Southeast Asian Earth Sciences 8, p. 257-268.
(Paleomag data from Philippines, Indo-China, Japan. Many published paleomagnetic studies on Mesozoic-Paleozoic rocks show magnetizations that are same as that of overlying Cenozoic volcanics, suggesting possible resetting, and making older rocks results suspect)

McCabe, R., D. Merrill, J.T. Cole & E. Lumadyo (1996)- The use of palaeomagnetic studies in understanding the complex Tertiary tectonic history of East and Southeast Asia. In: G.P. & A.C. Salisbury (eds.) Trans. 5th Circum-Pacific Energy and Mineral Resources Conference, Honolulu 1990, Gulf Publishing, Houston, p. 369-383.
(Same paper as McCabe et al. 1993)

McElhinny, M.W., B.J.J. Embleton, H. Max & Z.K. Zhang (1981)- Fragmentation of Asia in the Permian. Nature 293, p. 212-216.
(Compilation of Permian paleomagnetic data. Asia is composite continent formed by accretion of crustal blocks. Malay Peninsula and Japan were situated near Equator in Permian and therefore separated from Asian continent. Permian of Sino-Korean and Yangtze blocks of China also near Equator)

McElhinny, M.W., N.S. Haile & A.R. Crawford (1974)- Paleomagnetic evidence shows Malay Peninsula was not a part of Gondwanaland. Nature 252, 5485, p. 641-645.
(Reconnaissance paleomagnetic survey on Malay Peninsula suggests it lay at 15° N in Late Paleozoic, so could not have been part of Gondwanaland)

McGowran, B., M. Archer, P. Bock, T.A. Darragh et al. (2000)- Australasian palaeobiogeography: the Palaeogene and Neogene record. In: A.J. Wright et al. (eds.) Palaeobiogeography of Australasian fauans and floras, Memoir Assoc. Australasian Palaeontologists (AAP) 23 23, p. 405-470.

McLoughlin, S. (2001)- The breakup history of Gondwana and its impact on pre-Cenozoic floristic provincialism. Australian J. Botany 49, 3, p. 271-300.
(From Carboniferous to Cretaceous S continents broadly similar floras but some species-level provincialism apparent at all times. Gondwanan floras radical turnovers near end Carboniferous, end Permian and end Triassic that appear unrelated to isolation or fragmentation of supercontinent. Throughout Late Paleozoic and Mesozoic high-latitude southern floras maintained different composition to paleoequatorial and boreal regions even though they remained in physical connection with Laurasia for much of this time)

McManus, J. & R.B. Tate (1978)- Fragmentation of the China Plate and the development of marginal seas of S.E. Asia. Proc. SEAPEX Offshore South East Asia Conference, Singapore 1978, p. 1-14.
(Tectonics of SE Asia, particularly Sulu- Celebes Seas. Some marginal seas originated by intraplate spreading, others by border spreading)

Meert, J. (2003)- A synopsis of events related to the assembly of eastern Gondwana. Tectonophysics 362, p. 1-40.
(Assembly of E part of Gondwana supercontinent (incl. E Africa, Arabia, India, E Antarctica and Australia) resulting from complex series of orogenic events from ~750- 530 Ma. Rel. little on Australia, which in ~800-700 Ma restores to N Hemisphere)

Mei, S. & C.M. Henderson (2001)- Evolution of Permian conodont provincialism and its significance in global correlation and paleoclimate implication. Palaeogeogr. Palaeoclim. Palaeoecology 170, p. 237-260.
(Early Permian Gondwana Cool Water Province with Vjalovognathus in Canning, Carnarvon basins and W Timor. Permian conodont provincialism not distinct until Kungurian)

Mei, S. & C.M. Henderson (2002)- Comments on some Permian conodont faunas reported from Southeast Asia and adjacent areas and their global correlation. J. Asian Earth Sciences 20, 6, p. 599-608.
(Conodont faunas from SE Asia classified in new faunal provinces: Equatorial Warm Water (EWWP), peri-Gondwana Cool Water (GCWP) and N Cool Water (NCWP; N China). GCWP marked by Vjalovognathus, etc., EWWP by absence of Gondolelloides and Vjalovognathus in E-M Cisuralian, abundance of Sweetognathus and Pseudosweetognathus in Kungurian, etc. Mixed faunas between EWWP and GCWP include W Timor Artinskian, SE Pamirs Kungurian and Salt Range Guadalupian- Lopingian)

Mei, S., C.M. Henderson & B.R. Wardlaw (2002)- Evolution and distribution of the conodonts *Sweetognathus* and *Iranognathus* and related genera during the Permian, and their implications for climate change. Palaeogeogr. Palaeoclim. Palaeoecology 180, p. 57-91.
(On evolution of conodonts of E-M Permian Sweetognathus and Late Permian Iranognathus lineages)

Meister, C. (2007)- Les Phricodoceratidae Spath, 1938 (Mollusca, Cephalopoda): ontogenese, evolution et paleobiogeographie. Geodiversitas 29, 1, p. 87-117.
(p. 112-113: Lower Jurassic ammonites described from Roti by Krumbeck (1922; Pliensbachian Ibex zone) have N Tethys affinities, suggesting these are from exotic blocks now on S Tethys/ Australian margin?)

Metcalfe, I. (1983)- Southeast Asia. In: R.H. Wagner et al. (eds.) The Carboniferous of the world, 1, Int. Union Geol. Sci. Publ. 16, p. 213-243.
(Extensive review of Carboniferous in W and E Malay Peninsula, W and NE Thailand, Vietnam, Laos, N and E Sumatra, W Sarawak, etc. Sumatra Alas Fm of Late Visean age)

Metcalfe, I. (1984)- Stratigraphy, palaeontology and palaeogeography of the Carboniferous of Southeast Asia. Memoires Societe Geologique France, N.S. 147, p. 107-118. *(online at: www.researchgate.net/publication/273380797_Stratigraphy_palaeontology_and_palaeography of the C Etc.)*
(Older continental part of SE Asia four tectonic blocks (Sibumasu, Manabor (Malaya- Natuna- W Borneo), Indochina, S China), with independent pre-Triassic histories. Carboniferous mainly shallow marine with subordinate epicontinental and continental deposits. Carboniferous of Sibumasu continental margin deposits with glacial-marine diamictites. Manabor block shallow marine clastics with reefal limestones and abundant volcanics interpreted as possible island arc. C part of Indochina Block emergent in Carboniferous and bordered by non-marine. Carboniferous faunas of SE Asia mainly of Eurasian aspect)

Metcalfe, I. (1986)- Late Palaeozoic palaeogeography of Southeast Asia: some stratigraphical, palaeontological and palaeomagnetic constraints. In: G.H. Teh & S. Paramananthan (eds.) Proc. 5th Regional Congress Geology Mineral Energy Resources of SE Asia (GEOSEA V), Kuala Lumpur 1984, 1, Bull. Geological Society Malaysia 19, p. 153-164.
(online at: https://gsmpubl.files.wordpress.com/2014/09/bgsm1986012.pdf)
(First of many Metcalfe papers on SE Asian tectonic blocks, their Gondwanan origins and histories of rifting, drift and collision with Asia. SE Asia 4 tectonic blocks, SIBUMASU, MANABOR, Indochina and South China. Indochina and S China rifted off Gondwana in Late Devonian- E Carboniferous and sutured to each other by M

Carboniferous. SIBUMASU separated from Australian Gondwana in late Lower Permian. MANABOR accreted to Indochina/S China by Late Triassic, possibly earlier)

Metcalfe, I. (1988)- Origin and assembly of South-East Asian continental terranes. In: M.G. Audley-Charles & A. Hallam (eds.) Gondwana and Tethys, Geological Society, London, Special Publ. 37, p. 101-118.
(Documentation of stratigraphic successions and paleobiogeographic affinities of Sibumasu, East Malaya, Indochina and SW Borneo blocks)

Metcalfe, I. (1989)- Carboniferous and Permian palaeogeography of Southeast Asia. Comptes Rendus 9th Congres International de Stratigraphie et de Geologie du Carbonifere, Beijing 1987, 4, p. 245-264.

Metcalfe, I. (1990)- Allochthonous terrane processes in Southeast Asia. In: J. Dewey et al. (eds.) Allochthonous Terranes, Philosophical Transactions Royal Society London, Ser. A, 331, 1620, p. 625-640.
(online at: http://journals.royalsociety.org/content/d673155257474040/fulltext.pdf)

Metcalfe, I. (1991)- Late Palaeozoic and Mesozoic palaeogeography of Southeast Asia. Palaeogeogr. Palaeoclim. Palaeoecology 87, p. 211-221.
(online at: https://www.academia.edu/download/38333391/Metcalfe_1991_Palaeo-3.pdf)

Metcalfe, I. (1992)- Ordovician to Permian evolution of Southeast Asian terranes: NW Australian Gondwana connections. In: B.D. Webby & J.R. Laurie (eds.) Global perspectives on Ordovician geology, Proc. 6th Int. Symposium on the Ordovician System, A.A. Balkema, Rotterdam, p. 293-305. *(online at: https://www.researchgate.net/publication/273635421_Ordovician_to_Permian_evolution_of_Southeast_Asian_terranes_NW_Australian_Gondwana_connections)*
(Continental 'core' of SE Asia four main terranes: South China. Sibumasu, Indochina and East Malaya. Ordovician faunas of S China and Sibumasu strong affinities with N and NW Australia and Tasmania and include forms endemic to Australia and Gondwana. Affinities of E Palaeozoic faunas of Indochina and E Malaya not yet known. N China placed near N Australia, Sibumasu adjacent to NW Australia and S China, Indochina, Tarim, Tsaidam, Lhasa and Changtang blocks formed part of North India-Iran margin of Gondwana.)

Metcalfe, I. (1993)- Palaeomagnetic research in Southeast Asia: progress, problem and prospects. Exploration Geophysics 24, 2, p. 277-282.
(Stratigraphical, sedimentological, paleobiogeographic and paleomagnetic data suggest that probably all SE Asian continental terranes derived from Gondwana. Terranes assembled between Late Paleozoic and Cenozoic. Progressive CCW rotation of Borneo- Malay Peninsula region during Late Cretaceous- Cenozoic. Most Paleozoic data from mainland Asia probably affected by Late Carboniferous and Cretaceous resets. Paleomagnetic data vital for constraining movements of crustal blocks)

Metcalfe, I. (1993)- Southeast Asian terranes: Gondwanaland origins and evolution. In: R.H. Findlay et al. (eds.) Gondwana Eight- Assembly, evolution and dispersal, Proc. 8th Gondwana Symposium, Hobart, 1991, Balkema, Rotterdam, p. 181-200.
(online at: https://www.researchgate.net/publication/273635883_Southeast_Asian_terranes_Gondwanaland_origins_and_evolution)
(One of the early papers in milestone series by I. Metcalfe on SE Asia plate reconstructions. SE Asia is complex assembly of allochthonous continental terranes now far removed from their original sites of origin, together with island arcs, accretionary complexes and small ocean basins. Continental core with four main blocks, South China, Indochina, Sibumasu and East Malaya. Etc. etc.)

Metcalfe, I. (1994)- Late Palaeozoic and Mesozoic palaeogeography of Eastern Pangea and Tethys. In: A.F. Embry et al. (eds.) Pangea: global environments and resources, Canadian Society of Petroleum Geologists, Memoir 17, p. 97-111.
(online at: https://www.academia.edu/download/38332654/Metcalfe_1994_Pangea.pdf)
(Evolution of E Pangea and Tethys in Late Paleozoic- Mesozoic involved rifting of continental slivers/fragments from NE Gondwanaland, N-ward drift and amalgamation/accretion to form proto East Asia. Three continental

slivers rifted from NE Gondwanaland in Silurian- E Devonian (N China, S China, Indochina/ E Malaya, Qamdo-Simao and Tarim terranes), E-M Permian (Cimmerian continent, incl. Sibumasu, Lhasa and Qiangtang terranes) and Late Jurassic (W Burma terrane, Woyla terranes). N-ward drift of terranes effected by opening and closing of three successive Tethys oceans, Paleo-Tethys, Meso-Tethys and Ceno-Tethys)

Metcalfe, I. (1994)- Gondwanaland origin, dispersion, and accretion of East and Southeast Asian continental terranes. J. South American Earth Sciences 7, 3-4, p. 333-347.
(online at: https://www.academia.edu/14503828/Gondwanaland_origin_dispersion_and_accretion_of_East_and_Southeast_Asian_continental_terranes)
(On the assembly of Gondwana-derived allochthonous continental terranes, island arcs, etc. in SE Asia)

Metcalfe, I. (1995)- Gondwana dispersion and Asian accretion. Proc. IGCP Symposium on Geology of SE Asia, Hanoi XI/1995, Journal of Geology, Hanoi, ser. B, 5-6, p. 223-266.
(online at: https://www.academia.edu/24247563/Gondwana_dispersion_and_Asian_accretion)
(Modified version of Metcalfe (1996, Geological Society London SP106 below)

Metcalfe, I. (1996)- Pre-Cretaceous evolution of SE Asian terranes. In: R. Hall & J. Blundell (eds.) Tectonic evolution of Southeast Asia, Geological Society, London, Special Publ. 106, p. 97-122.
(online at: www.researchgate.net/publication/247220174_Pre-Cretaceous_evolution_of_SE_Asian Etc.)
(Pre-Cretaceous continental terranes of E and SE Asia all derived from Gondwanaland. Continental slivers rifted from N margin of Gondwanaland in Devonian (N China, S China, Indochina/East Malaya/Simao, Qaidam and Tarim), E-M Permian (Cimmerian continent incl. Sibumasu and Qiangtang); and Late Triassic-Late Jurassic (Lhasa, W Burma and Woyla). N drift of terranes accompanied by opening and closing of Paleo-Tethys, Meso-Tethys and Ceno-Tethys. Assembly of Gondwanaland-derived terranes began with amalgamation of S China and Indochina/ E Malaya in Late Devonian/E Carboniferous to form 'Cathaysialand'. Suturing of Sibumasu and Qiangtang to Cathaysia in Late Permian-Triassic. S and N China amalgamated, then accreted to Laurasia by Late Triassic-E Jurassic. Kurosegawa Terrane of Japan possibly from Australian Gondwana, accreted to Japanese Eurasia in Late Jurassic. Lhasa, W Burma and Woyla terranes accretion to SE Asia in Cretaceous. SW Borneo and Semitau terranes derived from S China/ Indochina by Cretaceous opening of marginal basin, subsequently destroyed by S-ward subduction during rifting of Reed Bank-Dangerous Grounds terrane from S China when S China Sea opened)

Metcalfe, I. (1996)- Gondwanaland dispersion, Asian accretion and evolution of the eastern Tethys. Australian J. Earth Sciences 43, p. 605-623.
(online at: www.academia.edu/14458322/Gondwanaland_dispersion_Asian_accretion_and_evolution Etc.)
(Modified version of Metcalfe (1996), above))

Metcalfe, I. (1997)- The Palaeo-Tethys and Palaeozoic- Mesozoic tectonic evolution of Southeast Asia. In: P. Dheeradilok et al. (eds.) Proc. Int. Conf. Stratigraphy and tectonic evolution of Southeast Asia and the South Pacific (GEOTHAI'97), Dept. Mineral Resources (DMR), Bangkok, 1, p. 260-272.
(online at: https://www.academia.edu/24249355/The_Palaeo_Tethys_and_Palaeozoic_Mesozoic_tectonic_evolution_of_Southeast_Asia?auto=download&email_work_card=download-paper)
(Main Paleotethys Ocean basin, which separates Late Paleozoic Gondwanaland from Cathaysian terrane, represented by Triassic suture zones Lancangjian and Changning-Menglian (SW China), Nan-Uttaradit and Sra Kaeo (Thailand) and Bentong-Raub (Peninsular Malaysia). Subsidiary branches of Paleotethys represented by Ailaoshan suture in Yunnan, Song Ma suture in Vietnam (E Carboniferous) and other possible suture segments in N Thailand and S China. Radiolarian assemblages from deep marine cherts show Paleotethys opened in M-L Devonian and closed in Late Triassic)

Metcalfe, I. (1998)- Palaeozoic and Mesozoic geological evolution of the SE Asian region: multidisciplinary constraints and implications for biogeography. In: R. Hall & J.D. Holloway (eds.) Biogeography and geological evolution of SE Asia. Backhuys Publishers, Leiden, p. 25-41.
(online at: http://searg.rhul.ac.uk/searg_uploads/2016/01/Metcalfe.pdf)

(On E and SE Asia 'jigsaw puzzle' of continental terranes. Various Asian terranes derived directly or indirectly from N margin of Gonwanaland, in Devonian, E-M Permian and Late Triassic-Jurassc.N-ward movement of the teranes created the Paleotethys, Mesotethys and Ceno-Tethys oceans. Suturing of Sibumasa and Qiantang terranes to Cathaysialand and amalgamation with North China in Permian-Triassic. Lhasa, W Burma and Woyla terranes rifted from Australian Gondwana in Late Triassic- Late Jurassic and accreted to proto-SE Asia in Cretaceous. SW Borneo and Semitau terranes derived from S China-Indochina margin by opening of subsequently-destroyed marginal basin. Etc.))

Metcalfe, I. (1999)- The ancient Tethys Oceans of Asia: how many? how old? how deep? how wide? UNEAC Asia papers, University of New England, Armidale, 1, p. 1-9.
(online at: www.une.edu.au/asiacentre/PDF/Metcalfe.pdf)
(Concept of ancient, now vanished Tethys Ocean first proposed by E. Suess (1893. Tethys complex in E Asia with remnants of three successive ocean basins: Paleo-Tethys (late E Devonian opening- M Triassic closing), Meso-Tethys (late E Permian opening- Late Cretaceous closing) and Ceno-Tethys (opening in Late Triassic (in W)/Late Jurassic (in E), closing in Cenozoic). Ocean basins water depths comparable to modern ocean basins and all three had widths of 2000- 3000 km in E parts at maximum development)

Metcalfe, I. (1999)- The ancient Tethys Oceans of Asia: how many? how old? how deep? how wide? In: Ratanasthein, B. & S.L. Rieb (eds.) Proc. International Symposium on Shallow Tethys 5, Chiang Mai 1999, p. 1-15.
(online at: https://www.academia.edu/download/44586979/Metcalfe_1999_Shallow_Tethys.pdf)
(Same paper as above)

Metcalfe, I. (1999)- Gondwana dispersion and Asian accretion: an overview. In: I. Metcalfe (ed.) Gondwana dispersion and Asian accretion, IGCP 321 Final Results Volume, A.A. Balkema, Rotterdam, p. 9-28. *(online at: www.researchgate.net/publication/273694493_Gondwana_dispersion_and_Asian_accretion_an_overview)*

Metcalfe, I. (1999)- The Palaeo-Tethys in East Asia. In: G.H. Teh (ed.) Proc. 9th Regional Congress Geology Mineral Energy Resources of SE Asia (GEOSEA '98), Kuala Lumpur 1998, Bull. Geological Society Malaysia 43, p. 131-143.
(online at: https://gsmpubl.files.wordpress.com/2014/09/bgsm1999013.pdf)
(Paleo-Tethys opened in Devonian when N China, S China, Tarim, Indochina separated from N Gondwanaland and closed in Permian- Triassic when Sibumasu/-Qiangtang terrane amalgamated with Indochina/ S China. Main suture zone in E Asia represented by Lancangjiang and Changning-Menglian zones of SW China, Nan-Uttaradit and Sra Kaeo zones of Thailand and Bentong-Raub suture zone of Peninsular Malaysia)

Metcalfe, I. (2000)- The nature and ages of Palaeo-Tethyan suture zones in East Asia. In: Papers 2nd Symposium IGCP Project 411, Geodynamic processes of Gondwanaland-derived terranes in Eastern Asia, Geosciences Journal (Korea) 4, Special Edition, p. 33-38.
(All East Asian terranes derived from Gondwanaland. Rifted and separated as three continental strips in Devonian, late early Permian and Late Triassic- Late Jurassic, opening Paleo-Tethys, Meso-Tethys and Ceno-Tethys oceans. East Asia formed by assembling/ closing of these oceans)

Metcalfe, I. (2000)- The Bentong-Raub suture zone. J. Asian Earth Sciences 18, 6, p. 691-712.
(Bentong-Raub Suture Zone of Malay Peninsula is closed segment of Devonian- M Triassic Paleo-Tethys ocean and boundary between Sibumasu and Indochina terranes. Suture zone result of Permian N-ward subduction of Paleo-Tethys under Indochina and Triassic collision of Sibumasu terrane. Sibumasu separated from Gondwana in late Sakmarian (E Permian), then drifted N in Permian-Triassic, with E Malaya I-type volcano-plutonic arc on Indochina margin. Main structural discontinuity in Peninsular Malaysia between Paleozoic and Triassic. Orogenic deformation started in U Permian-Lower Triassic. E-M Triassic, A-Type subduction and crustal thickening generated Late Triassic- E Jurassic Main Range syn- to post-orogenic granites. Foredeep basin developed on margin of Sibumasu in front of accretionary complex with Semanggol Fm rocks. Suture zone covered by latest Triassic- Cretaceous red bed overlap sequence)

Metcalfe, I. (2001)- The Bentong-Raub suture zone, Permo-Triassic orogenesis and amalgamation of the Sibumasu and Indochina terranes. Gondwana Research 4, 4, p. 701-702.
(online at: https://www.researchgate.net/profile/I-Metcalfe/publication/240439246_The_Bentong-Raub_Suture_Zon Etc.
(Abbreviated version of above paper)

Metcalfe, I. (2001)- Warm Tethys and cold Gondwana: East and SE Asia in Greater Gondwana during the Phanerozoic. In: R.H. Weiss (ed.) Contributions to Geology and Palaeontology of Gondwana in honour of Helmut Wopfner, Kolner Forum fur Geologie und Palaeontologie 22, Cologne, p. 333-348
(online at: https://www.academia.edu/14326587/Warm_Tethys_and_Cold_Gondwana_East_and_SE_Asia_in_Greater_Gondwana_during_the_Phanerozoic)

Metcalfe, I. (2001)- Palaeozoic and Mesozoic tectonic evolution and biogeography of SE Asia-Australasia (2001)- In: I. Metcalfe, J.M.B. Smith et al. (eds.) Faunal and floral migrations and evolution in SE Asia-Australasia, A.A. Balkema, Lisse, p. 15-34.
(online at: https://www.academia.edu/17983095/Palaeozoic_and_Mesozoic_tectonic_evolution_and_biogeography_of_SE_Asia_Australasia)
(Similar to sevral Metcalfe papers above. SE Asia is complex assembly of continental fragments, bounded by suture zones that represent former oceans. All of the main SE Asia terranes were part of 'Greater Gondwanaland' in E Paleozoic, and rifted and separated from NW Australia as three continental slivers with new ocean basins, at ~350 Ma (E Carboniferous, opening of Palaeo-Tethys; separation of China and Indochina terranes), 270 Ma (~E-M Permian, Mesotethys opening, separation of Sibumasu and Qiantang) and 200-140 Ma (Jurassic; separation of Lhasa, West Burma, ?Sikuleh; Borneo, W Sulaesi; opening of Neotethys). Etc.)

Metcalfe, I. (2002)- Permian tectonic framework and palaeogeography of SE Asia. J. Asian Earth Sciences 20, 6, p. 551-566.
(On Gondwanan versus S China/Indochina-derived continental terranes in SE Asia. 'Cathaysian' S China-Indochina and Simao terranes at equatorial paleolatitude in Permian, but derived from Gondwana in Devonian. Sibumasu attached to NW Australia Gondwana until Sakmarian, then evolved through Permian intermediate stage to Cathaysian, reflecting separation and N ward drift. W Birma and smaller terranes (Paternoster, W Sulawesi, Mangkalihat) split off Gondwana in Late Triassic- Jurassic. SW Borneo, Luconia, Reed Bank, Palawan derived from S China/ Indochina in Cretaceous. Various terranes in E Indonesia derived from New Guinea in Cenozoic)

Metcalfe, I. (2002)- Tectonic history of the SE Asian-Australian region. In: P. Kershaw et al. (eds.) Bridging Wallace's Line: the environmental and cultural history and dynamics of the SE Asian- Australian region, Advances in Geology 34, Catena Verlag, p. 29-48.

Metcalfe, I. (2005)- Asia: South-East. In: R.C. Selley et al. (eds.) Encyclopedia of Geology 1, Elsevier, Oxford, p. 169-198.
(Another elegant Metcalfe review of plate tectonic evolution of SE Asia since Early Paleozoic and distributions of mineral resources)

Metcalfe, I. (2008)- Gondwana dispersion & Asian accretion: an update. Proc. Int. Symposium Geoscience Resources and Environments of Asian Terranes (GREAT 2008), 4th IGCP 516 and 5th APSEG, Bangkok, p. 23-25.
(online at: www.geo.sc.chula.ac.th/Geology/Thai/News/Technique/GREAT_2008/PDF/003.pdf)
(Update of 1999 paper. Re-evaluations suggest W Sumatra and W Burma blocks separated from Gondwana in Devonian, along with Indochina and E Malaya and together with S China formed 'Cathaysialand' in Permian. 'Argoland', which separated from NW Australia in Jurassic previously interpreted to be W Burma but may be SW Borneo)

Metcalfe, I. (2009)- Late Palaeozoic and Mesozoic tectonic and palaeogeographic evolution of SE Asia. In: E. Buffetaut, G. Cuny et al. (eds.) Late Palaeozoic and Mesozoic continental ecosystems in SE Asia. Geological Society, London, Special Publ. 315, p. 7-23.
(online at: https://www.academia.edu/17980795/Late_Palaeozoic_and_Mesozoic_tectonic_and_palaeogeographical_evolution_of_SE_Asia)
(SE Asia collage of continental terranes derived from India-Australian margin of E Gondwana. Late Paleozoic-Mesozoic rifting and separation of three elongate continental slivers from E Gondwana and opening and closure of Paleo-Tethys, Meso-Tethys and Ceno-Tethys ocean basins. W Sumatra, W Burma, Indochina and East Malaya blocks separated from Gondwana in Devonian and with S China formed 'Cathaysialand' in Permian. They were translated W to positions outboard of Sibumasu Terrane by strike-slip tectonics in Late Permian-E Triassic at convergence between Meso-Tethys and Palaeo-Pacific plates. SW Borneo, previously considered of 'Cathaysian' origin, is possibly 'Argoland' that separated from NW Australia in Jurassic)

Metcalfe, I. (2009)- Comment on "An alternative plate tectonic model for the Palaeozoic-Early Mesozoic Palaeotethyan evolution of Southeast Asia (Northern Thailand-Burma)" by O.M. Ferrari et al. (2008). Tectonophysics 471, p. 329-332.
(Critique of Ferrari et al. redefining 'Shan-Thai' terrane in Thailand as Cathaysian, Indochina-derived terrane instead of traditional view of Gondwanan continental block, introducing unnecessary confusion. Mai Yuam Fault, identified as Paleo-Tethys suture, is Cenozoic fault. Paleo-Tethys suture zone represented by Inthanon Suture zone in Thailand, equivalent to previously recognized Inthanon zone. Concept of derivation of 'Orang Laut' terranes from S China- Indochina by back-arc spreading is innovative. Little evidence to support proposed S-wards subduction of Paleo-Tethys beneath E Gondwana in Permian)

Metcalfe, I. (2010)- Gondwana dispersion and Asian accretion: tectonic and palaeogeographic evolution of eastern Tethys. In: 6th Symposium Int. Geological Correlation Program (IGCP), Project 516, Geological anatomy of East and South Asia, Kuala Lumpur 2010, p. 13-15.
(online at: http://geology.um.edu.my/gsmpublic/IGCP516/IGCP516_2010_Proceedings.pdf)
(Brief version of Metcalfe 2011, etc.))

Metcalfe, I. (2011)- Tectonic framework and Phanerozoic evolution of Sundaland. Gondwana Research 19, p. 3-21. *(online at: https://imetcal2.une.edu.au/web-data/PDF%20Files/Metcalfe%202011%20Gond%20Res%20Sundaland.pdf)*
(Sundaland collage of continental blocks derived from E Gondwana and assembled by closure of multiple Tethyan and back-arc ocean basins. Core of Sundaland comprises Sibumasu block in W and Indochina-E Malaya block in E, with island arc terrane, which formed on Indochina- E Malaya margin, in-between. Paleo-Tethys represented by Changning-Menglian, Chiang Mai/Inthanon and Bentong-Raub suture zones. W Sumatra and possibly W Burma blocks separated from Gondwana, with Indochina and E Malaya in Devonian and accreted to Sundaland core in Triassic. W Burma now considered Cathaysian, similar to W Sumatra, from which it separated by Andaman Sea opening. SW Borneo and E Java-W Sulawesi tentatively identified as 'Banda Block' and 'Argoland', which separated from NW Australia in Jurassic and accreted to SE Sundaland in Cretaceous (puzzling how these rifted off NW Australia at same time, switch relative E-W positions along way, then both accreted to Sundaland margin at similar time but with Meratus suture separating them?; JTvG))

Metcalfe, I. (2011)- Palaeozoic-Mesozoic history of SE Asia. In: R. Hall, M.A. Cottam & M.E.J. Wilson (eds.) The SE Asian gateway: history and tectonics of Australia-Asia collision, Geological Society, London, Special Publ. 355, p. 7-35.
(online at: www.academia.edu/13303900/Palaeozoic_Mesozoic_history_of_SE_Asia)
(One of later versions of Metcalfe SE Asia Cambrian- Eocene reconstructions of Gondwana-derived blocks and Tethyan oceans. Recent modification is identification of SW Borneo and/or E Java- W Sulawesi as missing 'Argoland' that separated from NW Australia in Jurassic and accreted to SE Sundaland in Cretaceous)

Metcalfe, I. (2013)- Gondwana dispersion and Asian accretion: tectonic and palaeogeographic evolution of eastern Tethys. J. Asian Earth Sciences 66, p. 1-33.

(online at: https://www.academia.edu/10307779/Gondwana_dispersion_and_Asian_accretion_Tectonic_and_palaeogeographic_evolution_of_eastern_Tethys)
(Review paper on SE Asian plate tectonics. SW Borneo and E Java- W. Sulawesi now identified as missing 'Banda' and 'Argoland' blocks, separated from NW Australia in Late Triassic- Late Jurassic by opening of Ceno-Tethys and accreted to SE Sundaland by subduction of Meso-Tethys in Cretaceous)

Metcalfe, I. (2017)- Tectonic evolution of Sundaland. Bull. Geological Society Malaysia 63 (50th Anniversary Issue 1), p. 27-60.
(online at: www.gsm.org.my/products/702001-101709-PDF.pdf)
(Latest in series of Metcalfe review papers on SE Asian plate tectonics. By Late Triassic principal continental core blocks of Sundaland (Sibumasu, Sukhothai Arc, Simao, Indochina) had amalgamated and collided with S and N China to form proto-E and SE Asia. Paleo-Tethys represented by Changning-Menglian, Chiang Mai-Chiang Rai, Chanthaburi and Bentong-Raub Suture Zones that form boundary between Sibumasu and Sukhothai Arc. Sukhothai Arc formed on margin of Indochina in Carboniferous, then separated by back-arc spreading in Permian. Jinghong, Nan-Uttaradit and Sra Kaeo Sutures represent this closed back-arc basin. Cathaysian W Sumatra Block with its continental margin arc may well be displaced segment of Sukhothai Arc system, translated outboard of Sibumasu by strike-slip tectonics in Triassic. W Burma Block was already attached to Sundaland before Late Triassic and is likely disrupted part of Sibumasu. Nature of any hidden continental core of SW Borneo remains enigmatic. Etc.)

Metcalfe, I. (2021)- Multiple Tethyan ocean basins and orogenic belts in Asia. Gondwana Research 100, p. 87-130.
(Extensive review of Tethyan parts of S and SE Asia. Four Tethyan ocean basins recognised in Asia: (1) Proto-Tethys (Late Proterozoic- Silurian), (2) Palaeo-Tethys (M Devonian- Late Triassic), (3) Meso-Tethys (M Permian- Late Cretaceous) and (4) Ceno-Tethys (late M Triassic- Eocene). Asia giant convergent zone for >500 My, recording collision and accretion of Gondwana-derived continental blocks and Indian Craton. Three major orogenic belts in Asia: (1) Central Asian (evolution of Paleo-Asia Ocean, ending with Permian-Triassic Indosinian (Cimmerian) orogeny), (2) Tethyan (Tethysides) and (3) Alpine-Himalayan (evolution of Tethyan ocean basins (Cretaceous-Paleogene Himalayan-Tibetan Orogeny, caused by subduction of Meso- and Ceno-Tethys oceans and the Lhasa-Asia and India-Asia collisions).

Metcalfe, I., C. Jen, J. Chavet & S. Hade (eds.) (1999)- Gondwana dispersion and Asian accretion. IGCP 321 Final Results Volume, A.A. Balkema, Rotterdam, p. 1-361.
(Final results of IGCP Project 321 'Gondwana dispersion and Asian accretion'. Collection of 19 papers on tectonics of SE Asia)

Metcalfe, I., J.M.B. Smith, M. Morwood & I. Davidson (eds.) (2001)- Faunal and floral migrations and evolution in SE Asia- Australasia. A.A. Balkema, Lisse, p. 1-416.
(Collection of 31 papers on biogeography and paleobiogeography of SE Asia- Australia, presented at Armidale 1999 conference)

Metcalfe, I., F.C.P. Spiller, B. Liu, H. Wu & K. Sashida (1999)- The Paleo-Tethys in Mainland East and Southeast Asia: contributions from radiolarians studies. In: I. Metcalfe (ed.) Gondwana dispersion and Asian accretion, Final Results IGCP Project 321. A.A. Balkema, Rotterdam, p. 259-281.
(online at: www.researchgate.net/publication/273383337_The_Palaeo-Tethys_in_Mainland_East_and_Southeast_A Etc.)
(Radiolarian biostratigraphy in remnants of Paleo-Tethys ocean in Thailand, S China, Malaysia, etc., constrains ages of Paleotethys Ocean opening (Devonian) and closing when Sibumasu-Qiantang collided with Indochina/ S China in Triassic)

Meyerhoff, A.A. (1996)- Surge-tectonic evolution of southeastern Asia: a geohydrodynamics approach. J. Southeast Asian Earth Sciences 12, 3-4, p. 145-247.
(Unorthodox, non-plate tectonic model for tectonic history of SE Asia)

Meyerhoff, A.A., A.J. Boucot, D. Meyerhoff Hull & J.M. Dickins (1996)- Phanerozoic faunal and floral realms of the Earth: the intercalary relations of the Malvinokaffric and Gondwana realms with the Tethyan faunal realm. Geological Society of America (GSA) Memoir 189, p. 1-69.
(Review of global paleobiogeographic realms through time from 'anti-plate tectonics' perspective)

Michaux, B. (1991)- Distributional patterns and tectonic development in Indonesia: Wallace reinterpreted. Australian Systematic Botany (CSIRO) 4, 1, p. 25-36.

Michaux, B. (1994)- Land movements and animal distributions in east Wallacea (eastern Indonesia, Papua New Guinea and Melanesia). Palaeogeogr. Palaeoclim. Palaeoecology 112, p. 323-343.
(Present-day animal distribution patterns linked to plate tectonics)

Michaux, B. (1995)- Distributional patterns in west Wallacea and their relationship to regional tectonic structure. Sarawak Museum Journal 48, 69, p. 163-179.

Michaux, B. (2010)- Biogeology of Wallacea: geotectonic models, areas of endemism, and natural biogeographical units. Biological J. Linnean Society, London, 101, 1, p. 193-212.
(online at: https://doi.org/10.1111/j.1095-8312.2010.01473.x)
(Review of models of geological development of Indonesia and Philippines. Areas of present-day endemism within Wallacea identified. Tanimbar Islands biologically part of S Maluku. Timor (plus Savu, Roti, Wetar, Damar, Babar) and W Lesser Sunda islands form separate areas of endemism. Wallacea formed from complex of mainly Australasian exotic fragments linked by geological processes within complex collision zone)

Min, M., K.L. Khin, Q. Feng, C. Chonglakmani, D. Meischner, R. Ingavat-Helmcke & D. Helmcke (2001)- Tracing disrupted outer margin of Paleoeurasian continent through Union of Myanmar. J. China University of Geosciences 12, 3, p. 201-206.
(Discussion of difficulty of carrying Paleotethys suture between Gondwanan 'Sibumasu' terranes and Paleo-Eurasia continent through Myanmar and into Yunnan, S China. Main point of contention is position of Boashan Block, which has both Gondwanan and Tethyan characteristics in Permian. Margin farther W than usually assumed)

Mishra, H.K. (1996)- Comparative petrological analysis between the Permian coals of India and Western Australia: paleoenvironments and thermal history. Palaeogeogr. Palaeoclim. Palaeoecology 125, p. 199-216.

Mitchell, A.H.G. (1977)- Tectonic settings for emplacement of Southeast Asian tin granites. Bull. Geological Society Malaysia 9, p. 123-140.
(online at: https://gsmpubl.files.wordpress.com/2014/09/bgsm1977026.pdf)
(Most tin-bearing granitic rocks in SE Asia in one of three main belts: (1) Late Carboniferous- E Triassic East Belt (tin-bearing, emplaced in continental crust of E Malaya- E Central Thailand above E-dipping Benioff zone); (2) Late Triassic Central Belt ('Indosinian orogeny' syn-collisional granites, emplaced during collision of 'Sibumasu' (W Malaya, etc.); and (3) Western belt with widespread Late Cretaceous-E Eocene plutons (emplaced in W zone above E-dipping Benioff zone))

Mitchell, A.H.G. (1979)- Rift, subduction and collision-related tin belts. Bull. Geological Society Malaysia 11, p. 81-102.
(online at: https://gsmpubl.files.wordpress.com/2014/09/bgsm1979003.pdf)
(General discussion of tin belts in different tectonic settings, incl. SE Asian province)

Mitchell, A.H.G. (1981)- Phanerozoic plate boundaries in mainland SE Asia, the Himalayas and Tibet. J. Geological Society, London, 138, p. 109-122.
(Recognition of Phanerozoic subduction systems and two continental fragments of Gondwanaland through mainland SE Asia. Cambrian subduction system and 5 Mesozoic-early Cenozoic collision belts identified. Indochina, E Thailand and Cl Tibet accreted to China in E Triassic; western SE Asia and S Tibet separated from Gondwanaland in Permian or E Triassic and collided with Asia in Late Triassic. W Burma island arc

system collided with Asia in Jurassic. U Triassic flysch and schist in E Indoburman Ranges accreted to W Burma in Jurassic- E Cretaceous)

Mitchell, A.H.G. (1985)- Collision-related fore-arc and back-arc evolution of the northern Sunda Arc. Tectonophysics 116, p. 323-334.
(In fore-arc area of N Sunda Arc (W Burma-Andaman-Nicobar- W Thailand) emplacement of serpentinite melange diapirs and deposition of olistostromes were caused by Campanian collision with continental fragment since underthrust E-wards beneath arc. Age and position of E-directed thrusts and associated tin granites in continental back-arc area implies thrusting and generation of granites genetically related to collision)

Mitchell, A.H.G. (1986)- Mesozoic and Cenozoic regional tectonics and metallogenesis in mainland SE Asia. In: G.H. Teh & S. Paramananthan (eds.) Proc. GEOSEA V Conf., Kuala Lumpur 1984, 2, Bull. Geological Society Malaysia 20, p. 221-239.
(online at: https://gsmpubl.files.wordpress.com/2014/09/bgsm1986b12.pdf)
(Main Mesozoic tectonic event in mainland SE Asia was Late Triassic Indosinian orogeny. Deformation and uplift in Malaysia Main Range and N Thailand, emplacement of syn- to late-tectonic two-mica granites of Central Tin Belt, and imbricate thrusting in Bangka Island best be explained by E Triassic collision of Shan-Thai block foreland with Indochina block to E. Continental fragment, exposed in Indoburman Ranges, collided with Burma in latest Jurassic, etc.)

Mizutani, S. & S. Kojima (1992)- Mesozoic radiolarian biostratigraphy of Japan and collage tectonics along the eastern continental margin of Asia. Palaeogeogr. Palaeoclim. Palaeoecology 96, p. 3-22.
(On belt of Jurassic accretionary complex along E Asian margin from Japan to S, composed of deformed sediments with U Permian limestone, Triassic bedded cherts and Lower Jurassic siliceous shales and younger clastic rocks)

Mizutani, S., J. Shao & Q. Zhang (1990)- The Nadanhada Terrane in relation to Mesozoic tectonics on continental margins of East Asia. Acta Geologica Sinica (English Ed.) 3, 1, p. 15-29.
(Nadanhada Jurassic disrupted terrane in NE China mainly composed of Permo- Carboniferous limestone and greenstone, Triassic bedded chert and M Jurassic siliceous shale enclosed in Late Jurassic- E Cretaceous clastics. Identical to Mino terrane of Japan, and representing parts of long E Asian Late Jurassic- Cretaceous accretionary belt along E Asia continental margin after Triassic amalgamation of Chinese continent. Also included Ryukyu arc, Palawan Blocks of Philippines and probably Borneo (Danau Fm))

Molnar, P. & P. Tapponnier (1975)- Cenozoic tectonics of Asia: effects of a continental collision. Science 189 (4201), p. 419-426.
(Classic paper linking major strike slip faults in Asia to India-Asia collision)

Monnier, C. (1996)- Mechanismes d'accretion des domaines oceaniques arriere-arc et geodynamique de l'Asie du Sud-Est. These Doct. Universite de Bretagne Occidentale, p. 1-605. *(Unpublished)*
('Accretion mechanisms of oceanic fore-arc domains and geodynamics of SE Asia')

Montaron, B., P. Tapponnier, A. Briais & P.H. Leloup (2026)- A reconstruction of the last 50 My of South-East Asia's tectonic history. Tectonophysics 919, 230981, p. 1-18.
(online at: https://www.sciencedirect.com/science/article/pii/S0040195125003671)
(New series of (oversimplified) 2-D reconstructions of SE Asia in last 50 My, an extended version of the classic continental extrusion model of P. Tapponnier (1982, 1986). From ~46 Ma, a first NNE trending right-lateral fault opens Mergui basin. From ~42 until 32 Ma, five major NW-SE left-lateral strike-slip faults activate from SW to NE, extruding blocks to SE (formation of Pattani, Malay, Tonle Sap, Yinggehai and Natuna-Rajang pull-apart basins and terminating in Makassar, Nam Con Son, Cuu Long Basins and South China Sea). After ~15 Ma extrusion stops in Sundaland and migrates further N. A major tectonic reorganization follows on land with offshore inversion of motion of several microplates, initiating a thrust of Borneo over S margin of S China Sea, forming a sedimentary prism often misinterpreted as evidence for subduction of a proto-S China Sea. Etc.)

Morley, C.K. (2001)- Combined escape tectonics and subduction rollback-back arc extension: a model for the evolution of Tertiary rift basins in Thailand, Malaysia and Laos. J. Geological Society, London, 158, 3, p. 461-474.
(Tertiary rift basins of Thailand and adjacent countries show considerable variability in timing of rifting and inversion episodes. Rift basins developed on blocks that were extruded SE-ward, possibly tied to Himalayan extrusion tectonics. In Thailand major sinistral strike-slip motion ceased at ~30 Ma, before formation of most rift basins. Alternative mechanism to open rift basins is subduction rollback of Indian plate W of Thailand)

Morley, C.K. (2002)- A tectonic model for the Tertiary evolution of strike-slip faults and rift basins in SE Asia. Tectonophysics 347, p. 189-215.
(Two types of SE Asia Tertiary evolution models: (1) escape tectonics with no proto-S China Sea, (2) subduction of proto-S China Sea oceanic crust beneath Borneo. Proposed tectonic model with key points: (1) Ailao Shan- Red River shear zone mainly active in Eocene-Oligocene tied to extension in S China Sea, less active in Miocene; (2) three regions of metamorphic core complex development affected Indochina from Oligocene-Miocene; (3) Subduction of proto-S China Sea in Eocene- E Miocene necessary to explain evolution of NW Borneo; (4) Eocene-Oligocene collision of NE India with Burma activated extrusion tectonics in mainland SE Asia and right lateral motion along Sumatran subduction zone)

Morley, C.K. (2004)- Nested strike-slip duplexes, and other evidence for Late Cretaceous-Palaeogene transpressional tectonics before and during India-Eurasia collision in Thailand, Myanmar and Malaysia. J. Geological Society, London, 161, p. 799-812.
(Late Cretaceous S-type granites from Malaysia-Thailand to Myanmar long used to infer episode of crustal thickening, supported by late Cretaceous-Eocene ophiolites in Myanmar, but no evidence for associated fold-thrust belt. Fission-track studies of Thailand indicate modest regional uplift from ~80-40 Ma. Left lateral motion on major NW-SE-trending strike-slip fault zones (Mae Ping and Three Pagodas faults) in Myanmar and Thailand attributed to Himalayan-Tibetan escape tectonics, but fault zones are network of branching faults with important N-S trends as well as NW-SE trends. This diffuse 1000 km long/up to 250 km wide, branching network of strike-slip faults may represent Late Cretaceous- Paleogene transpressional belt. Himalayan escape tectonics represent later deformation)

Morley, C.K. (2007)- Variations in Late Cenozoic- Recent strike-slip and oblique-extensional geometries, within Indochina: the influence of pre-existing fabrics. J. Structural Geology 29, p. 36-58.
(From Yunnan to N Thailand, Late Cenozoic-Recent faults strike predominantly NNE-SSW, N-S to NNE–SSW and NE-SW to ENE-WSW. Associated sedimentary basins are aligned NE-SW to N-S. Fault patterns commonly interpreted as strike-slip dominated deformation, but N Thailand interpreted to have evolved mainly by oblique extension. Multiple episodes of basin inversion in N Thailand during Miocene require changes in stress pattern)

Morley, C.K. (2009)- Evolution from an oblique subduction back-arc mobile belt to a highly oblique collisional margin: the Cenozoic tectonic development of Thailand and eastern Myanmar. In: P.A. Cawood & A. Kroner (eds.) Earth accretionary systems in space and time, Geological Society, London, Special Publ. 318, p. 373-403.
(N to NE subduction beneath SE Asia during Mesozoic-Cenozoic resulted in development of hot, thickened crust in Thailand-Myanmar region in back-arc mobile belt setting. Setting changed in Eocene-Recent to highly oblique collision when India coupled with W Burma block)

Morley, C.K. (2012)- Late Cretaceous- Early Palaeogene tectonic development of SE Asia. Earth-Science Reviews 115, 1-2, p. 37-75.
(Late Cretaceous-E Paleogene history of continental core of SE Asia (Sundaland), prior to India- Asia collision. In Myanmar and Sumatra subduction s interrupted in Aptian-Albian by phase of arc accretion (Woyla and Mawgyi arcs) and in Java, E Borneo and W Sulawesi by collision of continental fragments rifted from N Australia. Subsequent resumption of subduction in Myanmar-Thailand sector explains: (1) early creation of oceanic crust in Andaman Sea in supra-subduction zone setting at ~95 Ma; (2) belt of granite plutons of Late Cretaceous- E Paleogene age in W Thailand and C Myanmar; (3) amphibolite grade metamorphism at 70-80 Ma in W and C Thailand; and (4) accretionary prism development in W Belt of Myanmar, until glancing collision with NE corner of Greater India promoted ophiolite obduction and deformation in E Paleogene)

Morley, C.K. (2013)- Discussion of tectonic models for Cenozoic strike-slip fault-affected continental margins of mainland SE Asia. J. Asian Earth Sciences 76, p. 137-151.
(On relationship between Cenozoic strike-slip faults of mainland SE Asia and adjacent sedimentary basins (Gulf of Thailand, Gulf of Martaban/Andaman Sea, Gulf of Tonkin). Most major onshore SE Asia strike-slip faults probably do not extend far offshore)

Morley, C.K. (2018)- Understanding Sibumasu in the context of ribbon continents. Gondwana Research 64, p. 184-215.
(Ribbon continent belts like Zealandia in SW Pacific provide analogues for Permo-Triassic development of Sibumasu. Key parameters for ribbon continents are width, and how rifting developed. Example of Sibumasu (~3000 km long and up to 500-600 km wide):(1) separated from N margin of Gondwana in E Permian; (2) basin inversion in Late Triassic and possibly E Jurassic, with mixed thick- and thin-skinned deformation; (3) extensional collapse around 215 Ma (Late Triassic); (4) Slab delamination and extension-related decompression melting generating granites and crustal thickening; (5) metamorphism relatively high T, lower P)

Morley, C.K. (2024)- Atypical syn-collisional wedges at thrust fronts: Their tectonic and gravity-driven development, and interpretation-related controversies. Earth-Science Reviews 249, 104663, p.
(Examples of atypical syn-collisional wedges that resemble accretionary prisms, but formed over subducted and/or underthrust lower plate continental crust in orogen f(off Sabah and Palawan, Indo-Burma Ranges, Banda Arc, etc.

Morley, C.K., R. King, R. Hillis, M. Tingay & G. Backe (2011)- Deepwater fold and thrust belt classification, tectonics, structure and hydrocarbon prospectivity: a review. Earth-Science Reviews 104, p. 41-91.
(Overview of deepwater fold-thrust systems. Two types: Type 1 mainly on passive margins, driven by sediment loading or local uplift, typically with high-quality continent-derived quartz sst reservoirs; Type 2 on active margins, in areas of continental convergence. Examples include NW Borneo, W Sulawesi- Makassar Straits, Banda Arc, Seram)

Morley, C.K. & Y. Wang (2023)- The Cenozoic hyper-oblique collision zone of Indochina: A re-appraisal of escape tectonics. Earth-Science Reviews 243, 104453, p. 1-60.
(Four main stages of development of Cenozoic strike-slip faults in Indochina: (1) widespread Paleogene transpressional deformation; (2) 30-27 Ma transition, with retreat of transpressional deformation to SE Tibetan Plateau; (3) 27-17 Ma onset of major sinistral displacement on ASRRSZ; (4) <17 Ma- Present, diachronous reversal of motion on many faults, and cessation of extension in Thailand rifts)

Morley, R.J. (2000)- Origin and evolution of tropical rain forests. John Wiley & Sons, New York, p. 1-362.
(SE Asia chapter describes Cenozoic vegetation response to plate tectonic evolution, as reflected in Indonesia palynology records. Middle Eocene arrival of palynomorphs known from older deposits in India is consequence of India-Asia collision. In M Eocene SW Sulawesi has Laurasian flora, and was attached to E Kalimantan. Makassar Straits became floral-faunal migration barrier in Late Eocene. First Australian- New Guinea floral elements (Casuarina, etc.) start appearing in W Java Sea around 22-21 Ma)

Morley, R.J. (2018)- Assembly and division of the South and South-East Asian flora in relation to tectonics and climate change. J. Tropical Ecology 34, 4, p. 209-234.
(Discussion of main phases of plant dispersal into and out of SE Asia in relation to plate tectonics and changing climates. Late Cretaceous poorly understood, but Paleocene topography mountainous, and climate probably seasonally dry. India's drift into perhumid low latitudes in Eocene brought dispersal into SE Asia of megathermal angiosperms which originated in W Gondwana, starting at ~49 Ma, and with terrestrial connection after~41 Ma. Oligocene seasonally dry climates except along E and SE seaboard of Sundaland, but with collision of Australian Plate with Sunda at end of Oligocene widespread perhumid conditions in region. With Late Miocene strengthening of Indian monsoon, seasonally dry conditions expanded. Some dispersals from Australasia after collision with Sunda. Pleistocene refuge theory applies to SE Asian region).

Morley, R.J. (2024)- The establishment of Palaeotropical rainforests from Africa to Oceania in relation to plate tectonics and zonal tropical climates. In: G. Dupont-Nivet et al. (eds.) Asian geodynamics, climate and biodiversity, Geological Society, London, Special Publ. 549, p. 113-136.
(Canopy-forming Dipterocarpus genera evolved in Africa in Late Cretaceous and dispersed to India. Palaeotropical rainforests formed in equatorial Africa in Campanian, in India in late Maastrichtian-Paleocene, in SE Asia in M Eocene and in Oceania in Miocene. Current megadiverse SE Asian rainforests descended from immigrant taxa)

Morley, R.J. & H.P. Morley (2021)- The prelude to the Holocene: tropical Asia during the Pleistocene. In: N. Kumaran & D. Padmalal (eds.) Holocene Climate Change and Environment, Elsevier, Chapter 1, p. 1-32.
(Review of climate and vegetation history for tropical Asia and India for last 3 Myrs. Pliocene witnessed demise of humid tropical forests across India, which were replaced in N by open grasslands, which supported diverse fauna, elements of which migrated to Java during E Pleistocene. During Pleistocene glaciations, expansion of desert and savanna vegetation at expense of deciduous and evergreen forests across Indian subcontinent, while in SE Asia rain forests remained along equator, with pine forest at N subequatorial latitudes, followed by savanna in Indochina, but with expansion of seasonal evergreen and deciduous forests to S, across emergent Java Sea and Java. Widespread Pleistocene megafauna may have modified vegetation across region)

Morley, R.J., J. Teasdale & H.P. Morley (2024)- Southeast Asia tectonics, palaeogeography and palaeoclimate. Proc. GESGB-SEAPEX Asia Pacific Conference, London 2024, 1p. *(Abstract only)*
(online at: https://archives.datapages.com/data/southeast-asia-petroleum-exploration-society/data/033/033001/pdfs/15.pdf)
(Discussion of diagreements with existing plate tectonic reconstructions. Palaeoclimate data favours plate a more northerly position of Borneo in Eocene compared to today, with extrusion of Sundaland after collision of India with Asia, with consequentCW rotation of Borneo into current equatorial position during Oligocene- E Miocene. Rotation accompanied by extension, especially during Late Eocene and Oligocene. No figures)

Moyne, S. & P. Neige (2007)- The space-time relationship of taxonomic diversity and morphological disparity in the Middle Jurassic ammonite radiation. Palaeogeogr. Palaeoclim. Palaeoecology 248, p. 82-95.
(Australia biogeographic realm comprises Western Australia, New Zealand, New Guinea and Sula Islands. Not much specific data/ interpretation)

Moyne, S., P. Neige, D. Marchandet & J. Thierry (2004)- Repartition mondiale des faunes d'ammonites au Jurassique moyen (Aalenien superieur a Bathonien moyen): relations entre biodiversite et paleogeographie. Bull. Societe Geologique France 175, 5, p. 513-523.
('Global distribution of ammonite faunas in the Middle Jurassic (Upper Aalenian to Middle Bathonian): relations between biodiversity and paleogeography'. Tethyan, Pacific, Boreal domains and associated epicratonic platforms divided into 16 paleobiogeographical provinces. Provinces that show strong endemism are isolated (Boreal and SE Tethyan margins))

Muller, R.D. & M. Seton (2015)- Paleophysiography of ocean basins. In: Encyclopedia of Marine Geosciences, Springer, Dordrecht, p. 1-15.
(Review of ocean basins, with global reconstructions for last 200 Myrs)

Muller, R.D., M. Seton, S. Zahirovic, S.E. Williams, K.J. Matthews, N.M. Wright, G.E. Shephard, K.T. Maloney, N. Barnett-Moore, M. Hosseinpour, D.J. Bower & J. Cannon (2016)- Ocean basin evolution and global-scale plate reorganization events since Pangea breakup. Annual Review Earth Planetary Sciences 44, p. 107-138.
(Revised global plate motion model from Triassic at 230 Ma- present day. Plate velocities controlled or modified by increases in subduction processes and collisional events and ridge subduction events)

Najman, Y., E. Appel, M. Boudagher-Fadel, P. Bown, A. Carter, E. Garzanti, L. Godin, J. Han, U. Liebke, G. Oliver et al. (2010)- Timing of India-Asia collision: Geological, biostratigraphic, and palaeomagnetic constraints. J. of Geophysical Research: Solid Earth 115, B12, B12416, p. 1-18.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2010JB007673)
(Qumiba section located S of (Neotethys) Yarlung Tsangpo suture in Tibet, with youngest marine sediments E Eocene age (Assilina- Discocyclina; ~51-53 Ma), in broad agreement with timing of cessation of marine facies elsewhere in region. Dating of detrital zircons indicates Asian contribution, thus documenting time of arrival of Asian material onto Indian plate, and suggesting initial contact between India-Asia in E Eocene)

Nakamura, K., D. Shimizu & Z. Liao (1985)- Permian palaeobiogeography of brachiopods based on faunal provinces. In: K. Nakazawa & J.M. Dickins (eds.) The Tethys, her paleogeography and paleobiogeography from Paleozoic to Mesozoic, Tokai University Press, Tokyo, p. 185-198.
(On brachiopod provinciality of Early, Middle and Late Permian in Asia: Gonwana Tethyan, Cathaysian Tethyan, Angara Tethyan, West Tethyan, etc. No data points from Indonesia-New Guinea)

Nicoll, R.S. (2004)- New Permian cold water conodont faunas from the Tethyan Gondwanan margin of Australia. GSA Rocky Mountain and Cordilleran Joint Meeting, 20-11 *(Abstract only)*

Nicoll, R.S. & I. Metcalfe (1998)- Early and Middle Permian conodonts from the Canning and southern Carnarvon basins, W Australia; their implications for regional biogeography and paleoclimatology. In: G.R. Shi et al. (eds.) Strzelecki Int. Symposium Permian of eastern Tethys; biostratigraphy, palaeogeography and resources. Proc. Royal Society of Victoria 110, 1-2, p. 419-461.
(Small, low diversity conodont faunas from E-M Permian of S Carnarvon- Canning basins of W Australia (paleolatitude up to 60°S). Species of Hindeodus and Vjalovognathus cool-temperature tolerant forms were first conodonts to invade after Late Carboniferous-E Permian glaciation. Faunas of similar age from Timor (paleolatitude ~45°S) significantly greater faunal diversity)

Nicoll, R.S. & I. Metcalfe (2001)- Cambrian to Permian conodont biogeography in East Asia-Australasia. In: I. Metcalfe et al. (eds.) Faunal and floral migrations and evolution in SE Asia-Australasia. Balkema, Lisse, p. 59-72.
(Conodont faunas of allochthonous East Asian terranes show biogeographic affinities with Australasia during Cambrian- Permian, suggesting close proximity or Australian Gondwanaland from ~500- 250 Ma)

Nie, S., D.B. Rowley & A.M. Ziegler (1990)- Constraints on the location of Asian microcontinents in Palaeo-Tethys during the Late Palaeozoic. In: W.S. McKerrow & C.R. Scotese (eds.) Palaeozoic palaeogeography and biogeography, Geological Society, London, Memoir 12, p. 397-409.
(Overview of Permian terranes history, mainly of mainland Asia. Biogeographic provinces well developed in Late Paleozoic due to steep equator-to-pole gradients. As continents rifted from S margin of Paleo-Tethys, they lost temperate Gondwanan affinities and acquired sub-tropical to tropical floras and faunas. A S belt of terranes, from Helmand block in Iran-Afghanistan, through W Qiangtang and Lhasa blocks of Tibet to Sibumasu block of Thailand-Malaya, all rifted off margins of Gondwana in Permian. Cathaysian floras existed in N parts of Gondwana (New Guinea), and since Cathaysian plants like Gigantopteris had to be dispersed by seeds this suggests land connections between Cathaysian microcontinents and Gondwana)

Niu, Y., Y. Liu, Q. Xue, F. Shao, S. Chen, M. Duan, P. Guo, H. Gong, Y. Hu, Z. Hu, J. Kong et al. (2015)- Exotic origin of the Chinese continental shelf: new insights into the tectonic evolution of the western Pacific and eastern China since the Mesozoic. Science Bulletin (China) 60, 18, p. 1598-1616.
(online at: http://engine.scichina.com/publisher/scp/journal/SB/60/18/10.1007/s11434-015-0891-z?slug=full%20text)
(Basement of continental shelf beneath E and S China Seas may be of exotic origin, geologically unrelated to continental lithosphere of E China. Jurassic-Cretaceous granitoids in region associated with W Pacific oceanic subduction. 'Sudden' termination of granitoid magmatism at ~88 ± 2 Ma suggests trench jam at ~100 Ma, pointing to collision of buoyant oceanic plateau or microcontinent. Jammed trench (suture) located near coastline of SE continental China. Trench jam at ~100 Ma led to re-orientation of Pacific plate motion, making

boundary between Pacific plate and newly accreted plate of E Asia transform fault E of exotic-origin continental shelf. This explains apparent ~40 Myr magmatic gap from ~88 to ~50 Ma)

Noakes, L.C. (1977)- Review of provenance for mineral sands and tin in Southeast Asia. United Nations ESCAP, CCOP, Technical Bulletin 11, p. 157-168.
(online at: https://repository.unescap.org/items/62741596-bd53-4f3d-b9bd-fc94701cbe59)

Ogg, J.G., F.M. Gradstein, J.A. Dumoulin, M. Sarti & P. Brown (1994)- Sedimentary history of the Tethyan margins of Eastern Gondwana during the Mesozoic. In: R.A. Duncan et al. (eds.) Synthesis of results from Scientific Drilling in the Indian Ocean, American Geophysical Union (AGU), Geophysical Monograph 70, p. 203-224.
(Review of Mesozoic of Gondwana margins of E Tethys Ocean (Australian and Himalayan margins, Timor and ODP Legs 122-123). Region drifted N in Triassic, entering tropical paleolatitudes in Late Triassic- E Jurassic, then returned to mid-latitudes for M Jurassic- E Cretaceous. Episodes of deltaic sandstone progradation over shelves. Widespread hiatus between Callovian shelf deposits and Oxfordian deep-water sediments, coinciding with block faulting off NW Australia. Shallow depths of carbonate compensation during Late Jurassic- E Cretaceous over most of Argo basin off NW Australia caused deposition of radiolarian-rich claystone. Volcanism accompanied final stages of rifting between India and Australia in Late Berriasian-Valanginian. Late Barremian and Aptian rise in CCD, with warming and increased organic-rich claystone)

Ogg, J.G. & U. von Rad (1994)- The Triassic of the Thakkhola (Nepal). II: Paleolatitudes and comparison with other Eastern Tethyan margins of Gondwana. Geologische Rundschau 83, p. 107-129.
(Comparison of Triassic in Nepal Himalaya and other parts of continental margin of Gondwana that faced E Tethys ocean and was continuous from Arabia to NW Australia (incl. Timor). Paleomagnetic data suggest Gondwana progressively shifted N into lower latitudes, causing increase in carbonate deposition through Triassic on Himalaya-Australian margins. General mega-cycle of major transgression at base Triassic, followed by general shallowing-upward of facies during M and Late Triassic and latest Triassic regression)

Oh, C., J. Legrand, K. Kim, M. Philippe & I. Paik (2011)- Fossil wood diversity gradient and Far-East Asia palaeoclimatology during the Late Triassic- Cretaceous interval. J. Asian Earth Sciences 40, p. 710-721.
(Mesozoic fossil floras of E Asia (China, Mongolia, Siberia, Korea, Japan) with (1) northern Tetori flora reflecting warm-temperate and moderately humid climate and (2) southern Ryoseki-type floras with features of hot and arid/ semi-arid floras and Tetori-type plants being 'typical of conditions' (nothing on SE Asia))

Okada, H. & N.J. Mateer (eds.) (2000)- Cretaceous environments of Asia. Developments in Palaeontology and Stratigraphy 17, Elsevier, p. 1-255.
(Collection of 15 papers on Cretaceous of Japan, Philippines, mainland E Asia; nothing on Indonesia/ New Guinea)

Oostingh, C.H. (1938)- Betrekkingen tusschen het Indische en het Mediterrane Tertiair. Handelingen 8e Nederlands-Indisch Natuur Wetenschappelijk Congres, Soerabaja 1938, p.
('Relationships between the East Indies and Mediterranean Tertiary'. Neogene mollusc biostratigraphy and comparisons)

Ozawa, T. (1987)- Permian fusulinacean biogeographic provinces in Asia and their tectonic implication. In: A. Taira & M. Tashiro (eds.) Historical biogeography and plate tectonic evolution of Japan and Eastern Asia, Terra Scientific Publishing, Tokyo, p. 45-63.

Parsons, A.J., K. Hosseini, R.M. Palin & K. Sigloch (2020)- Geological, geophysical and plate kinematic constraints for models of the India-Asia collision and the post-Triassic central Tethys oceans. Earth-Science Reviews 208, 103084, p. 1-63.
(Substantial review of models for India-Asia collision and Central Tethys oceans)

Parsons, A.J., K. Sigloch & K. Hosseini (2021)- Australian plate subduction is responsible for Northward motion of the India-Asia collision zone and ~1,000 km lateral migration of the Indian slab. Geophysical Research Letters, 48, 18, p. 1-13.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/pdf/10.1029/2021GL094904)

Page, K.N. (2008)- The evolution and geography of Jurassic ammonoids. Proc. Geologists Association, London, 119, 1, p. 35-57.
(Jurassic ammonites 7 suborders, in ~20 distinguishable biogeographical provinces and subprovinces. S Pan-Tethyan Realm includes Mediterranean-Caucasian, E Pacific, Indo-Pacific and Austral realms/ subrealms. Indo-Malgach Province recognizable first in Callovian, with endemic Sphaeroceratidae (Macrocephalites, Subkossmatia) and Perisphinctidae (Indosphinctes, Choffatia, Kinkeliniceras, etc.). Persisted into Oxfordian times, with place of Macrocephalitinae taken by endemic Mayatinae. By Tithonian, several restricted Indo-Pacific/Austral genera and endemic species: Pachysphinctes, Virgatosphinctes, Aulacosphinctoides, Himalayitidae, Neocomitidae (incl. endemic Blanfordiceras), Uhligites, etc.)

Peltzer, G. & P. Tapponnier (1988)- Formation and evolution of strike-slip faults, rifts, and basins during the India-Asia collision: an experimental approach. J. of Geophysical Research 93, B12, p. 15085-15117.
(More extensive discussion of Tapponnier et al. 1982 plasticine models, used to explain SE Asia extrusion)

Peng, Y., B. Zhang, H. Cao, X. Wang, G. Chi, C. Liu, J. Tian, Z. Wang, Y. Zhou & T. Deng (2025)- Genesis of Late Cretaceous Sn deposits and magmatism in the Yidun Terrane, China: Further northward extension of the Southeast Asian Tin Belt and implication for exploration Gondwana Research 148, p. 368-392.
(Yidun Terrane in China (E Tibetan Plateau) argued to be a N extension of the Late Cretaceous Southeast Asian Tin Belt (SATB).any Sn-Pb-Zn-Ag and Cu-Mo-W deposits. New garnet and cassiterite U-Pb ages (99-97 Ma) from Gongjuelong Sn deposit consistent with ages of nearby Pb-Zn-Ag deposits and zircon U-Pb ages (~98 Ma) of causative Late Cretaceous Haizishan granites.)

Philippe, M., M. Bamford, S. McLoughlin, L.S.R. Alves, H.J. Falcon-Lang, S. Gnaedinger, E.G. Ottone, M. Pole, A. Rajanikanth, R.E. Shoemaker, T. Torres & A. Zamuner (2004)- Biogeographic analysis of Jurassic-Early Cretaceous wood assemblages from Gondwana. Review Palaeobotany Palynology 129, p. 141-173.
(Distribution of Jurassic- Early Cretaceous fossil wood across Gondwana suggests 5 climate zones: summer wet, desert, winter wet, warm temperate, cool temperate. Araucarian-like conifer wood dominant, cosmopolitan element, whereas other taxa more provincialism)

Pitfield, P.E.J. (1987)- South-East Asia Granite Project- Report on the geochemistry of the Tin islands of Indonesia. British Geological Survey, Overseas Directorate, Report No. MP/87/9/R, p. 1-51 + Appendices *(Unpublished)*
(text online at: https://resources.bgs.ac.uk/PublicationPDFs/19799969.pdf)
(maps online at: https://resources.bgs.ac.uk/PublicationPDFs/19799970.pdf)
(Extensive geochemical studies of Triassic- E Jurassic I-type and S-type granites on Bangka, Belitung and Riau islands (Singkep, Karimun, Kundur, Bintan, Batam, etc.))

Pitfield, P.E.J. (1987)- Geochemistry of the Tin Islands granites of Indonesia in relation to those of Peninsular Malaysia. Warta Geologi 13, p. 125-133.
(online at: https://gsmpubl.files.wordpress.com/2014/09/ngsm1987003.pdf)
(In Thai-Malay Peninsula two separate granite provinces established, separated by Raub-Bentong line suture: (1) Main Range granitoids (associated with 'Sibumasu' Lower Paleozoic shallow marine sequences) and (2) Eastern Province (C and E Belts) granitoids (associated with Permo-Triassic deeper water volcano-sedimentary sequences). Tin Islands of Indonesia largely fall in Permo-Triassic volcano-sedimentary terrain, but characteristics of granites variable. Comparisons of granitoids suggest S-ward extrapolation of Raub-Bentong line between Karimun (E Province type) and Kundur (Main Range type) along chain of isles comprising Merak gabbro. Further S it may pass through C Singkep Island between Dabo (E Province type) and unnamed Main Range pluton in SW Belitung seems to comprise largely E Province plutons)

Pitfield, P.E.J., E.J. Cobbing, M.C.G. Clarke, D.I.J. Mallick & L.H. Teoh (1987)- Granite provinces in the Southeast Asian Tin Belt. In: M.K. Horn (ed.) Trans. 4th Circum Pacific Energy and Mineral Resources Conference, Singapore 1986, p. 575-589.
(Four granite provinces delineated in SE Asia tin belt: (1) Eastern Province (I-type, Carboniferous- Triassic 200-280 Ma; volcanic arc, and 70-80 Ma), (2) Main Range (S-type, mainly Triassic, 200-230 Ma; syn-collisional), (3) N Thailand Migmatitic (S-type, Permo-Triassic; syn-collisional) and (4) Western (Peninsular Thailand- Burma, S and I-types, Cretaceous 82-98 and 130 Ma). E and C Belts of Peninsular Malysia distinguished by Hutchison (1977), but are similar. Tin Islands of Indonesia part of E Province, Permo-Triassic. Widespread Cretaceous post-orogenic plutons, but not in Main Range and Tin Islands, and not associated with mineralization)

Pitfield, P.E.J., L.H. Teoh & E.J. Cobbing (1990)- Textural variation and tin mineralization in granites from the main range province of the Southeast Asian Tin Belt. Geological Journal 25, p. 419-429.
(Textural evolution from coarse K-feldspar megacrystic granite, through heterogeneous granite porphyry to microgranite corresponds to sequence of geochemical evolution)

Polhemus, D.A. (1996)- Island arcs, and their influence on Indo-Pacific biogeography. In: A. Keast & S.E. Miller (eds.) The origin and evolution of Pacific island biotas, New Guinea to eastern Polynesia: patterns and processes, SPB Academic Publishing, Amsterdam, p. 51-66.

Powell, C.M. & B.D. Johnson (1980)- Constraints on the Cenozoic position of Sundaland. Tectonophysics 63, p. 91-109.
(Old paper on India collision and evolution of Sundaland)

Powell, C. McA., B.D. Johnson & J.J. Veevers (1980)- Constraints on the positions of India, Australia and Southeast Asia since the Late Cretaceous. Proc. 5th Conference SE Asia Petroleum Exploration Society (SEAPEX V), Singapore, p. 82-89.
(Paleomagnetic data from Indochina, Malaysia and Kalimantan show similar declination at similar times, suggesting much of older continental nuclei of SE Asia acted as single continental block ('Sundaland') at least since ~80 Ma. Plate motions derived from continental paleomagnetism and seafloor spreading show continental Sundaland moved W-ward across wake of N-moving Greater India ~15 My ago (M Miocene) while at same time Australia moved N-ward across Sundaland 's wake)

Pusok, A.E. & D.R. Stegman (2020)- The convergence history of India-Eurasia records multiple subduction dynamics processes. Science Advances 6,19, eaaz8681, p. 1-8.
(online at: https://www.science.org/doi/epdf/10.1126/sciadv.aaz8681
(Indian plate movement towards Eurasia in Cretaceous at fastest rates ever recorded. Two distinct pulses of fast motion, separated by noticeable slowdown. Arrival of Reunion mantle plume initiated intra-oceanic subduction zone, adding enough force to drive plates at anomalous speeds. The two-stage closure of double subduction system, including accretion of island arc at 50 Ma, led to protracted India-Eurasia collision)

Qian, X., S. Jin, Y. Wang, P.A. Cawood, Y. Yu, M. Udchachon, K.A.Mustapha, T.C. Sheldrick, Y. Zhang & C. Gan (2025)- Nature and tectonic setting of the Paleotethyan giant igneous belt in Southeast Asia. Gondwana Research 141, p. 228-245.
(Paleotethyan giant igneous belt records Late Paleozoic-Triassic history of Paleotethys Ocean subduction and consumption of oceanic crust. Subduction began in Late Carboniferous (~315 Ma) and continued until M Triassic (~240 Ma). Slab roll-back started after ~270 Ma (M Permian). Transition from subduction to initial continental collision from ~237 Ma (M-L Triassic boundary). Gravitational collapse of orogenic belt during Late Triassic with major phase at ~220 Ma (Norian), forming Central granite province)

Qasim, M., J. Ashraf, L. Ding, J.I. Tanoli, F. Cai, I.A. Abbasi & S.U.R.K. Jadoon (2024)- Rapid India–Asia initial collision between 50 and 48 Ma along the western margin of the Indian Plate: detrital zircon provenance evidence. Geosciences (MDPI) 14, 11, 289, p. 1-20.
(online at: https://www.mdpi.com/2076-3263/14/11/289)

(Combined U-Pb geochronological data and sandstone petrography from Fort Munro, Pakistan, along W margin of Indian Plate show uppermost Ghazij Fm with first evidence of <100 Ma zircons, attributed to northern source (Kohistan-Ladakh arc), after earlier constent older zircons provenance from India. Provenance shift from India to Asia also reflected in sandstone petrography. Provenance change attributed to onset of Asia-India collision along W part at ~50-48 Ma (E Eocene), i.e. younger than collision ages reported from C and NW segments of Indian plate margin (70–59 Ma and 56 Ma, respectively))

Qiu, Y. & B. Zhang (2000)- Eastern extension of the Paleotethys in southern China. Zhongquo Quyu Dizhi (Regional Geology of China), Beijing, 19, 2, p. 175-180.
(E section of Paleotethys suture extends from Qinghai-Tibet to W Yunnan, S to Putong, Changning-Menglian, Uttarradit and Bentong-Raub, through Kalimantan (Kuching), Palawan, Luzon, Taiwan and Japan. Present 'U' shape of suture zone caused by N-moving Indian plate, S China Sea spreading and W-pushing Philippine Sea plate since 45 Ma. Restored Paleotethys suture orienteded E-W from Late Cretaceous- Early Cenozoic)

Raes, N. & P.C. van Welzen (2009)- The demarcation and internal division of Flora Malesiana: 1857-present. Blumea- Biodiversity, Evolution and Biogeography of Plants 54, 1-3, p. 6-8.
(online at: https://www.ingentaconnect.com/contentone/nhn/blumea/2009/00000054/f0030001/art00002)
(Recent review of present-day plant geographic boundaries in 'Malesia' floristic region (= mainly the Indonesian Archipelago) since work of Zollinger (1857). Three floristicsub-regions, corresponding closely to plate tectonic evolution of the archipelago: (1) West (Sundaland continental region), (2) Central ('Wallacea', microplates between Wallace Line and Lydekker Line) and (3) East (Sahul Shelf- New Guinea)):

Rangin, C. (2016)- Rigid and non-rigid micro-plates: Philippines and Myanmar-Andaman case studies. Comptes Rendus Geoscience 348, 1, p. 33-41.
(online at:https://comptes-rendus.academie-sciences.fr/geoscience/item/10.1016/j.crte.2015.10.008.pdf
(Philippine Mobile Belt complex tectonic zone composed of rigid rotating crustal blocks. In Myanmar, N-most tip of Sumatra-Andaman subduction system also complex zone of various crustal blocks in-between convergent plates, but sustaining internal deformation with platelet buckling, indicative of non-rigid behavior)

Raven, P.H. & D.I. Axelrod (1972)- Plate tectonics and Australasian paleobiogeography. Science 176, 4042, p. 1379-1386.
(On relationship between modern faunal- floral distributions and Australia- SE Asia plate tectonic history)

Rees, P.M., A.M. Ziegler, M.T. Gibbs, J.E. Kutzbach, P.J. Behling & D.B. Rowley (2002)- Permian phytogeographic patterns and climate data/model comparisons. Journal of Geology 110, 1, p. 1-31.
(online at: www.geo.arizona.edu/rees/2202-4.pdf)
(Global 'icehouse-hothouse' climate transition began during Permian. Reconstructions for two stages, Sakmarian (285-280 Ma) and Wordian/ Kazanian (267-264 Ma), integrating floral with lithological data to determine climates globally)

Ren, J., B. Niu, J. Wang, X. Jin, L. Zhao & R. Liu (2013)- Advances in research of Asian geology- a summary of 1:5M International Geological map of Asia project. J. Asian Earth Sciences 72, p. 3-11.
(Asia is composite continent consisting of three major cratons: Siberian, Indian and Arabian and three huge orogenic belts with minor cratons and microcontinents. Main body of Asian continent took its shape in Mesozoic. Main orogenic belts: Paleo-Asian, Tethyan and Pacific. Small cratons, like Sino-Korea, Yangtze, Tarim, and Sibumasu were on N margin of Gondwana before disappearance of Paleo-Asian Ocean. Ophiolites in Asia progressively younger from N to S, reflecting accretion of Asia by S-ward migration of orogenic belts. Large amounts of Mesozoic volcanic rocks in E Asian coastal areas mainly of Cretaceous age. Most Carboniferous- Permian volcanic rocks in C. Asia not arc volcanics, but product of extensional stage)

Ren, J., K. Tamaki, Sitian Li & J. Zhang (2002)- Late Mesozoic and Cenozoic rifting and its dynamic setting in Eastern China and adjacent areas. Tectonophysics 344, p. 175-205.

(On widespread Late Mesozoic and Cenozoic extension in E China and adjacent areas. First rift stage in Late Jurassic- E Cretaceous, second phase in NE Asia. Paleogene stage widespread continental rift systems and continental margin basins in E China (incl. S China Sea))

Rensch, B. (1936)- Die Geschichte des Sundabogens, eine tiergeographische Untersuchung. Borntraeger, Berlin, p. 1-318.
('The history of the Sunda Arc: a zoogeographic investigation'. Results of 1927 German biological 'Rensch-Sunda Expedition' to the Lesser Sunda Islands (Lombok, Sumbawa, Flores). Zoogeographic provinces, mainly of the W Indonesian region)

Replumaz, A., H. Karason, R.D. van der Hilst, J. Besse & P. Tapponnier (2004)- 4-D evolution of SE Asia's mantle from geological reconstructions and seismic tomography. Earth Planetary Science Letters 221, p. 103-115.
(online at: https://www.researchgate.net/publication/46650371_4-D_evolution_of_SE_Asia%27s_mantle_from_geological_reconstructions_and_seismic_tomography)
(Reconstructions of SE Asia block motions from India to Taiwan since ~50 Ma from tomography of subducted lithosphere)

Rich, T.H. & G.C. Young (1996)- Vertebrate biogeographic evidence for connections of the east and southeast Asian blocks with Gondwana. In: Z.X. Li, I. Metcalfe & C.McA. Powell (eds.) Breakup of Rodinia and Gondwanaland and Assembly of Asia, Australian J. Earth Sciences 43, 6, p. 625-634.
(Fluctuating affinities between aquatic faunas of China and Australia in Devonian. Within S China Block similar endemic freshwater fish faunas on Yangtze and Huanan terranes demonstrate juxtaposition in mid-Paleozoic. Triassic tetrapod faunas of Australia quite distinct from China and Thailand)

Richards, J.P. (2015)- Tectonic, magmatic, and metallogenic evolution of the Tethyan orogen: from subduction to collision. Ore Geology Reviews 70, 4, p. 323-345.
(Review of tectonic, magmatic and metallogenic history of Tethyan orogen fromt Carpathians to Indochina, with focus on formation of porphyry Cu±Mo±Au deposits, the most characteristic mineral deposit type formed during both subduction and collisional processes in region)

Ricou, L.E. (1994)- Tethys reconstructed: plates, continental fragments and their boundaries since 260 Ma from Central America to Southeastern Asia. Geodinamica Acta 7, 4, p. 169-218.
(online at: https://www.tandfonline.com/doi/epdf/10.1080/09853111.1994.11105266?needAccess=true)
(Evolution with plate reconstructions of the former Tethys ocean since 260 Ma (Late Permian))

Ricou, L.E. (1995)- Tethys and transit plate patterns viewed against long-term periodicity of magnetic field reversals. Physics Earth Planetary Interiors 87, p. 255-265.
(On Tethyan pattern of transit plates between converging boundary in N and diverging boundary in S (repeatedly offset by S-ward shifts))

Ridd, M.F. (1971)- South East Asia as part of Gondwana. Nature 234, p. 531-533.
(Stratigraphic evidence in Thailand and Malaya suggest they were once joined with India (E Permian tilloids in Phuket Group of Thailand, etc., cratonic clastic source from W for Malay Peninsula and Thailand, detrital diamonds in Permian Phuket Gp of Thailand, etc.). India and SE Asia must have drifted N to collide with mainland Asia after break-up of Gondwanaland. 'Interesting' reconstruction)

Ridd, M.F. (1980)- Possible Palaeozoic drift of SE Asia and Triassic collision with China. J. Geological Society, London, 137, 5, p. 635-640.
(Paleozoic- E Mesozoic of Thai-Malay Peninsula provide evidence of subduction zone to E and, in Lower Paleozoic, cratonic sediment source to W. First paper to recognize separation of W Thai- Malay Peninsula from Gondwana in mid-Paleozoic and collision with mainland Asia in Late Triassic?)

Ridd, M.F. (2023)- SE Asia as part of Gondwana: a 1960s regional mapping project over Southern Thailand that lay behind the hypothesis. In: R.W.H. Butler et al. (eds.) Geological mapping of our world and others, Geological Society, London, Special Publ. 541, p. 329-346.
(BP reconnaissance geological mapping over S Thailand in 1960s threw new light on differences in Paleozoic succession between Upper and Lower Peninsula. Phuket Group of Upper Peninsula with thick diamictite-bearing succession of Devonian?- E Permian age and apparently sourced in W, suggesting possible Gondwana origin for SE Asia, a contentious concept at the time, but now widely accepted. Broad regional mapping projects such as BP's in Thailand may reveal important new stratigraphic and tectonic insights)

Rigby, J.F. (1998)- Upper Palaeozoic floras of SE Asia. In: R. Hall & J.D. Holloway (eds.) Biogeography and geological evolution of SE Asia, Backhuys Publishers, Leiden, p. 73-82.
(online at: http://searg.rhul.ac.uk/searg_uploads/2016/01/Rigby.pdf)
(Minor Carboniferous flora in Thailand and W Malaysia (including 'Kuantan flora'), probably similar to S China floras. More extensive Permian floras known from Thailand, Laos, W. Malaysia, Sumatra and Irian Jaya. All are 'Cathaysian' floras, but some floras from Thailand and Irian Jaya also contain Gondwanan Glossopteris)

Rigby, J.F. (1999)- Permian floras and palaeogeography with particular emphasis on Gondwanaland and the Tethyan margin. In: B. Ratanasthien & S.L. Rieb (eds.) Proc. Int. Symposium Shallow Tethys (ST) 5, Chiang Mai 1999, Dept. of Geological Science, Chiang Mai University, p. 185-196 *(ST5 book online at: https://library.dmr.go.th/elib/cgi-bin/opacexe.exe?op=mmvw&db=Main&skin=S&mmid=19206&bid=17374)*
(Review of Permian floral provinces and paleo-reconstructions. Glossopteris floras endemic to Gondwanaland, but penetrated into Cathaysian Gigantonuclea and Pecopteris floral domain in New Guinea and Thailand, suggesting Tethyan seaway not a major barrier to migration. Etc.)

Ringenbach, J.C., C. Clerc & E. Masini (2017)- Rifted margins structural variety, worldwide and in SE Asia. Exploration issues. Proc. Asia Petroleum Geoscience Conference and Exhibition (APGCE 2017), EAGE, Kuala Lumpur, 43562, p. 184-188. *(Extended Abstract)*

Rong, J., A.J. Boucot, Y.Z. Su & D.L. Strusz (1985)- Biogeographical analysis of late Silurian brachiopod faunas, chiefly from Asia and Australia. Lethaia 28, 1, p. 39-60.
(Silurian shallow marine brachiopod Retziella Fauna known from SW Tienshan, China, N Vietnam and E Australia. Possibly also in N Korea, C Pamirs, Afghanistan and New Zealand (Sino-Australian Province). Coeval Tuvaella Fauna occurs only in S marginal belt of Siberian Plate (Mongolo-Okhotsk Province))

Ross, C.A. & J.R.P. Ross (1985)- Carboniferous and Early Permian biogeography. Geology (GSA) 13, 1, p. 27-30.

Rowley, D.B. (1992)- Reconstructions of the Circum-Pacific region. In: G.E.G. Westermann (ed.) The Jurassic of the Circum-Pacific, Cambridge University Press, p. 15-26.

Roy, A., N. Mandal & J. van Hunen (2024)- Dynamic evolution of competing same-dip double subduction: New perspectives of the Neo-Tethyan plate tectonics. Earth Planetary Science Letters 647, 119032, p.
(manuscript online at: https://durham-repository.worktribe.com/output/3197430)
(Models of (intra-oceanic) 'Same-dip double-subduction systems' offer insights into complex tectonic evolution of major Neo-Tethyan subduction zones, particularly the Indo-Eurasian and Andaman convergent systems, where multiple Cretaceous- E Tertiary intra-Neotethys subbduction episodes were identified (Kohistan Arc, Andaman Arc, etc.))

Roy, B.C. (1974)- Geologie, ressources minerales et geophysique de l'Asie tropicale humide. In: Ressources maturelles de l'Asie tropicale humide, UNESCO, Paris, p. 93-129.
(online at: https://unesdoc.unesco.org/ark:/48223/pf0000010409_fre)
('Geology, mineral resources and geophysics of tropical humid Asia'. Broad overview of stratigraphy and mineral resources of SE Asia, by former Director of Geological Survey of India)

Roy, S.S. (1978)- Eastern Tethys and microplates framed in Himalayan, Central and Southeast Asian geology. In: P. Nutalaya (ed.) Proc. 3rd Regional Conference Geology and Mineral Resources SE Asia, GEOSEA III, Bangkok 1978, p. 165-172.
(Early version of SE Asian plates history)

Safonova, I. & S. Maruyama (2014)- Asia: a frontier for a future supercontinent Amasia. International Geology Review 56, 9, p. 1051-1071.
(online at: www.tandfonline.com/doi/pdf/10.1080/00206814.2014.915586)
(Review of tectonic blocks and continental growth of Asia and prediction of formation of future supercontinent 'Amasia' 200-250 Myrs from now)

Santini, F. & R. Winterbottom (2002)- Historical biogeography of Indo-Western Pacific coral reef biota: is the Indonesian region a centre of origin? J. of Biogeography 29, 29, p. 189-205.
(online at: https://www.academia.edu/2503326/Historical_biogeography_of_Indo_western_Pacific_coral_reef_biota_is_the_Indonesian_region_a_centre_of_origin)
(Most lineages of Indo-West Pacific marine fauna may have originated in western Indian Ocean, Australia, or SW Pacific, probably from lineages that remained isolated after breakup of Gondwanan supercontinent, or because of movement of island arcs)

Sato, T. (1975)- Marine Jurassic formations and faunas in Southeast Asia and New Guinea. In: T. Kobayashi & R. Toriyama (eds.) Geology and Palaeontology of Southeast Asia, University of Tokyo Press, 15, p. 151-189.
(Compilation of Jurassic fossils/ stratigraphy in SE Asia. Jurassic rel. rare. May be classified as (1) thick geosynclinal sequences in Sumatra, Timor and New Guinea; (2) marine calcareous facies with rich macrofaunas in E Sulawesi, Sula, Buru, Ceram and Misool; (3) marine clastic sediments with poor molluscs in W Thailand/ Burma, W Sarawak/NW Kalimantan, Laos, Cambodia, Vietnam, etc. and (4) Khorat Group continental red beds in NE Thailand- S Laos)

Sato, T. and CCOP Working Group (2000)- Geotectonic map of East and Southeast Asia: sheets 4, 5 and 6. CCOP-CPCEMR Geotectonic Map Project. CCOP, Technical Bulletin 27, p. 1-16.
(Geotectonic Map of E and SE Asia. Sheet 4: Philippines, Vietnam, S China, Sheet 5: Malaysia, W Indonesia, Sheet 6: E Indonesia)

Sato, T. and CCOP Working Group (2002)- Geotectonic map of East and Southeast Asia: sheets 1, 2, 3 and 8. CCOP-CPCEMR Geotectonic Map Project. CCOP, Technical Bulletin 31, p. 1-16.
(Tectonic maps E and SE Asia: Sheet 1: Shikhote Alin, Korea, NE China, Japan), Sheet 2: C and S China, Taiwan, Ryukyu arcs), Sheet 3: S China, Indochina, Malaysia, Myanmar), Sheet 8: W Pacific Ocean. Also available in digital format)

Sautter, B. & M. Pubellier (2022)- Structural control of Mesozoic orogens on SE Asia Basin opening. J. Asian Earth Sciences 230, 105207, p. 1-20.
(Key review of SE Asia tectonics. Present continental margin of Sundaland developed alongside large magmatic arc active from Permian to M Cretaceous, subsequently stretched during Cenozoic. Rifting of Cenozoic basins of SE Asia triggered and conditioned by relaxation of orogens that assembled Sunda Plate in past)

Schellart, W.P., Z. Chen, V. Strak, J.C. Duarte & F.M. Rosas (2019)- Pacific subduction control on Asian continental deformation including Tibetan extension and eastward extrusion tectonics. Nature Communications 10, 4480, p. 1-15.
(online at: https://www.nature.com/articles/s41467-019-12337-9.pdf)
(India-Asia collision caused extensive intraplate deformation in Asia. Synchronous interaction of collision and subduction zones explain Asian deformation. E-ward continental extrusion and Asian backarc basin formation controlled by large-scale Pacific and Sunda slab rollback. Indentation and rollback produce ~260-360 km of E-ward extrusion and large-scale clockwise upper mantle circulation from Tibet to E Asia and back to India)

Schellart, W.P. & G.S. Lister (2005)- The role of the East Asian active margin in widespread extensional and strike-slip deformation in East Asia. J. Geological Society, London 162, p. 959-972.
(Most of E Asia Cenozoic deformation not extrusion tectonics, but back-arc extension caused by E-ward rollback of subducting slab along E Asian active margin and collapse of overriding plate towards retreating hinge-line. Extension took place along ~7400 km long stretch of E Asian margin during most of Cenozoic)

Schuster, R.M. (1972)- Continental movements, "Wallace's Line" and Indomalayan-Australasian dispersal of land plants: some eclectic concepts. The Botanical Review 38, 1, p. 3–86.
(Early review of history of development of the extremely diverse land plant floras of SE Asia and adjacent regions, mainly as result of continental drift/ plate tectonic evolution and ensuing migration pathways)

Schwan, W. (1985)- The worldwide active Middle/Late Eocene geodynamic episode with peaks at ±45 and ±37 Mybp, and implications and problems of orogeny and sea-floor spreading. Tectonophysics 115, p. 197-234.
(Numerous tectonic events globally in M-L Eocene at ~45 Ma and ~37 Ma, suggesting major reorganization in plate tectonic pattern. (not much specifically on SE Asia, but may be relevant; JTvG)

Scotese, C. (2001)- Atlas of Earth History, PALEOMAP Project, University of Texas, Arlington, p. 1-52.
(Atlas of global plate and paleogeographic reconstructions for 20 time periods from 650 Ma- Recent. For SE Asia major source was Hutchison (1989))

Scotese, C.R., A.J. Boucot & W.S. McKerrow (1999)- Gondwanan palaeogeography and palaeoclimatology. J. African Earth Sciences 28, p. 99-114.
(Reconstructions of Gondwana with interpreted paleoclimates from Late Ordovician-Cretaceous)

Scotese, C.R. & R.P. Langford (1995)- Pangea and paleogeography of the Permian. In: P.A. Scholle et al. (eds.) The Permian of Northern Pangea. Springer, Berlin, p. 3-19.

Searle, M.P. (2019)- Timing of subduction initiation, arc formation, ophiolite obduction and India–Asia collision in the Himalaya. In: P.J. Treloar & M.P. Searle (eds) Himalayan tectonics: A modern synthesis, Geological Society London, Special Publications 483, p. 19-37.
(online at: https://www.researchgate.net/publication/327604556_Timing_of_subduction_initiation_arc_formation_ophiolite_obduction_and_India-Asia_collision_in_the_Himalaya)
(Reconstruction of W Himalaya requires three subduction systems operating beneath Spong arc, Dras-Kohistan arc and Asian continent during Late Cretaceous–Paleocene. Final closure of Neo-Tethys in E Eocene. Etc.)

Searle, M.P., L.J. Robb & N.J. Gardiner (2016)- Tectonic processes and metallogeny along the Tethyan mountain ranges of the Middle East and South Asia (Oman, Himalaya, Karakoram, Tibet, Myanmar, Thailand, Malaysia). In: J. Richards (ed.) Tectonics and metallogeny of the Tethyan orogenic belt, Soc. Economic Geologists (SEG), Special Publ. 19, Chapter 12, p. 301-327.
(Genesis of mineral deposits in Tethyan collision zones of Asia, in: (1) oceanic crust (hydrothermal Cu-Au; Fe, Mn nodules) and mantle (Cr, Ni, Pt), in ophiolite complexes around Arabia/India- Asia collision (Oman, to Myanmar, Andaman Islands); (2) island arcs and ancient subduction complexes (VMS Cu-Zn-Pb), in Dras-Kohistan arc (Pakistan) and arc complexes along Myanmar-Andaman segment; (3) Andean-type margins (Cu-Au-Mo porphyry; epithermal Au-Ag) in Jurassic-Eocene Transhimalayan ranges and Myanmar; (4) continent-continent collision zones prominent along Myanmar-Thailand-Malaysia Sn-W granite belts, less common along Himalaya. Mogok metamorphic belt of Myanmar known for gemstones associated with regional high T metamorphism (ruby, spinel, sapphire, etc))

Sengor, A.M.C. (1979)- Mid-Mesozoic closure of Permo-Triassic Tethys and its implications. Nature 279, 5714, p. 590-593.
(First definition of the Cimmerian continent as thin and very long continental strip between Paleotethys and Neo-Tethys suture zones (in SE Asia called Sibumasu; JTvG))

Sengor, A.M.C. (1984)- The Cimmeride orogenic system and the tectonics of Eurasia. Geological Society of America (GSA), Special Paper 195, p. 1-74.
(Major review of plate tectonic history of the Alpine- Himalayan system, which is product of obliteration of the Tethys Ocean. During E-M Mesozoic Tethyan domain consisted of two oceans, separated by string of continents called Cimmerian continent, which had begun separating from N margin of Gondwanaland in Triassic (although rifting in E-most parts had begun earlier). N of Cimmerian continents was Paleo-Tethys, S of it was Neo-Tethys. Closure of Paleo-Tethys formed Cimmerides (Carpathians- Caucasus-Tibet to E Sulawesi), closure of Neotethys formed the Alpides)

Sengor, A.M.C. (1985)- The story of Tethys: how many wives did Okeanos have? Episodes 8, 1, p. 3-12.
(online at: www.episodes.co.in/www/backissues/81/ARTICLES--3.pdf)
(Tethys ocean is ancestral sea out of which Alpine-Himalayan mountain ranges grew. The main Tethys had formed until Triassic, but older Tethys (Paleo-Tethys) existed, the closure of which formed Cimmeride orogenic system, which is distinct from, but largely overprinted by Alpide orogenic system, which is product of demise of 'classical Tethys' (Neo-Tethys))

Sengor, A.M.C. (1985)- Die Alpiden und die Kimmeriden: Die verdoppelte Geschichte der Tethys. Geologische Rundschau 74, 2, p. 181-213.
(Similar to Sengor (1986) below. Repeated episodes of Tethyan Ocean closing: Paleotethys closed by accretion of Cimmerides terranes, Neotethys by accretion of Alpide terranes)

Sengor, A.M.C. (1986)- The dual nature of the Alpine-Himalayan system: Progress, problems and prospects. Tectonophysics 127, 3, p. 177-195.
(Alpine-Himalayan system interpreted as places where two independent Tethyan ocean complexes (Palaeo- and Neo-Tethys) vanished during Permo-Carboniferous- E Cretaceous and late Cretaceous- Present respectively. Older orogen is called Cimmerides, younger Alpides. Cimmerides, together forming Tethysides)

Sengor, A.M.C. (1987)- Tectonics of the Tethysides: orogenic collage development in a collisional setting. Annual Review Earth Planetary Sciences 15, p. 213-244.
(Review of plate tectonic history of the Alpine- Himalayan- Indonesian mountain ranges since Late Paleozoic)

Sengor A.M.C. (1992)- The Palaeo-Tethyan suture: a line of demarcation between two fundamentally different architectural styles in the structure of Asia. Island Arc 1, 1p. 78-91.
(Paleo-Tethyan suture separates regions characterized by two different tectonic styles in Tethysides. N of suture (Iran, Turkmenistan, Afghanistan, Tadjikistan, Kirgizstan, Uzbekistan, Kazakhstan large parts of Russia and China), orogenic development characterized by large subduction-accretion complexes developed since Late Proterozoic. S of Paleo-Tethyan suture, orogeny characterized by Sumatra- or Andean-type continental margin arc that in places became island arc by back-arc basin rifting and later collided with Atlantic continental margin to create Alpine- or Himalayan-type orogenic belts. Paleo-Tethyan suture is line across which rate of continental enlargement by subduction-accretion changed dramatically. Rel. little on SE Asia)

Sengor A.M.C. (1998)- Die Tethys: vor hundert Jahren und heute. Austrian J. Earth Sciences (Mitteilungen Osterreichischen Geologischen Gesellschaft) 89 (1996), p. 5-177.
(online at: https://www.zobodat.at/pdf/MittGeolGes_89_0005-0177.pdf)
('The Tethys: hundred years ago and today'. Extensive historic review of discovery and development of interpretations of Tethys Ocean(s). Includes chapter (p. 104-114) on contributions to tectonic understanding of mountain building by the Dutch 'heroes' geologists working in Indonesia between 1900-1940, particularly Molengraaff, Brouwer, Wing Easton, Smit Sibinga, who were early supporters of 'mobilism', i.e. Wegener's continental drift hypothesis)

Sengor, A.M.C., D. Altiner, A. Clin, T. Ustaosmer & K.J. Hsu (1988)- Origin and assembly of the Tethyside orogenic collage at the expense of Gondwana Land. In: M.G. Audley-Charles & A. Hallam (eds.) Gondwana and Tethys, Geological Society, London, Special Publ. 37, p. 119-181.

(Major review of plate tectonic history of the Alpine- Himalayan- Indonesian mountain ranges since Late Paleozoic. Mainly on mainland S Asia)

Sengor, A.M.C., D. Altiner, C. Zabcı, G. Sunal, N. Lom, E. Aylan & T. Oner (2023)- On the nature of the Cimmerian continent. Earth-Science Reviews 247, 104520, p. 1-145.
(online at: https://www.sciencedirect.com/science/article/pii/S001282522300209X)
(Cimmerian Continent (first proposed by Sengor, 1979) is narrow continental strip that rifted from NE Gondwanaland mostly during Permian, from Balkan regions to Indonesia. Collided with Laurasian margin between latest Triassic and Late Jurassic. Cimmerian Continent did not leave Gondwana in one piece, but submarine platforms in Turkey, and what is here called the Greater Lhasa (from Afghanistan to Myanmar) began separating both from Gondwana-Land and from rest of Cimmerian continent around same time in Permian. North part of Cimmerian continent remained a large, island arc-type ribbon continent from Turkey to Malaysia (Rhodope-Pontide Fragment in Turkey, most of Transcaucasia and Iran, Farah, W Qiangtang, Bao-Shan, Myanmar Shan States/W Thailand/W Malaysia blocks). This coherent 'ribbon continent' was almost wholly an ensialic arc; N margin of Cimmerian Continent Pacific-type arc. Many oceanic basins that opened within and behind Cimmerian Continent (incl. Neo-Tethys) were back-arc basins and Cimmerian continent had serpentine motion as it traversed Tethyan realm. Cimmerian continent also had complex internal tectonics.(see p. 123- 125: for SE Asian Cimmerides, but virtually nothing on Indonesia Sumatra and beyond?- JTvG)).

Sengor, A.M.C. & S. Atayman (2009)- The Permian extinction and the Tethys: an exercise in global geology. Geological Society of America (GSA), Special Paper 448, p. 1-85.
(End-Permian faunal extinctions may be consequence of sealing off of Paleo-Tethys ocean from Panthalassa by land bridge formed from Cimmerian Continent, Cathaysian and Manchuride orogenic collages and Tuva-Mongol fragment of eastern Altaids. Limited Late Permian water exchange between Paleo-Tethys and Panthalassa and Neo-Tethyan rifts, starting anoxia in Paleo-Tethys)

Sengor, A.M.C., S. Atayman & R. Presnell (2008)- Paleo-Tethys, Permian extinction, and stratabound copper-sulfide deposits of the Cimmerides. In: J.E. Spencer & S.R. Titley (eds.) Ores and orogenesis: Circum-Pacific tectonics, geologic evolution and ore deposits, Arizona Geological Society Digest 22, p. 19-30.

Sengor, A.M.C., A. Cin, D.B. Rowley & S. Nie (1991)- Magmatic evolution of the Tethysides. Palaeogeogr. Palaeoclim. Palaeoecology 87, p. 411-440.
(Five maps showing spatial and temporal evolution of magmatic activity along Tethysides for: (1) late Carboniferous- Permian; (2) Triassic- E Jurassic; (3) M Jurassic-early Cretaceous; (4) late Cretaceous-early Cenozoic and (5) late Cenozoic-present)

Sengor, A.M.C., A. Cin, D.B. Rowley & S.Y. Nie (1993)- Space-time patterns of magmatism along the Tethysides: a preliminary study. Journal of Geology 101, 1, p. 51-84.
(Five maps of magmatism along the Tethysides for: Late Carboniferous and Permian (320-248 Ma), Triassic and Early Jurassic (247-188 Ma), Middle Jurassic-Early Late Cretaceous (187-98 Ma), early Late Cretaceous-early Cainozoic (97-25 Ma), and late Cainozoic (24-0 Ma))

Sengor, A.M.C. & K.J. Hsu (1984)- The Cimmerides of Eastern Asia: history of the eastern end of Palaeo-Tethys. Memoires Societe Geologique France 17, p. 139-167.

Sengor, A.M.C. & B.A. Natalin (1996)- Palaeotectonics of Asia, fragments of a synthesis. In: A. Yin & T.M. Harrison (eds.) Tectonic evolution of Asia, Cambridge University Press, p. 486-640.

Setchell, W.A. (1930)- The Wallace and Weber lines: a suggestion as to climate boundaries. Proc. 4th Pacific Science Congress, Java 1929, III, p. 311-321.

Seton, M. & R.D. Muller (2008)- Reconstructing the junction between Panthalassa and Tethys since the Early Cretaceous. In: J.E. Blevin et al. (eds.) Eastern Australasin basins symposium III, Energy security for the 21st century, Sydney, Petroleum Exploration Society Australia (PESA), Special Publ., p. 263-266.

(online at: https://www.researchgate.net/publication/232095770_Reconstructing_the_junction_between_Panthalassa_and_Tethys_since_the_Early_Cretaceous)
(Series of plate reconstructions of now mostly vanished oceanic plates (Eastern Neotethys, Junction Plate, etc.) between Australia and Eurasia since 140 Ma)

Seton, M., R.D. Muller, S. Zahirovic, C. Gaina, T. Torsvik, G. Shephard, A. Talsma, M. Gurnis, M. Turner, S. Maus & M. Chandler (2012)- Global continental and ocean basin reconstructions since 200 Ma. Earth-Science Reviews 113, p. 212-270.
(online at: https://www.earthbyte.org/Resources/Pdf/Seton_etal_Global_Plate_Model_ESR2012.pdf)
(Major review of ocean basins evolution, incl. Indian Ocean and Tethys)

Sewell, R.J., A. Carter & M. Rittner (2016)- Middle Jurassic collision of an exotic microcontinental fragment: Implications for magmatism across the Southeast China continental margin. Gondwana Research 38, p. 304-313.
(Major deformation event in Hong Kong between 164-161 Ma (M-L Jurassic) linked to collision of microcontinent along SE China continental margin. Accreted terrane zircon age spectra close affinities to sources along N Gondwana margin. Collision of exotic terrane and subduction rollback, hastened foundering of postulated flat slab beneath SE China, leading to widespread igneous event at 160 Ma)

Shahabpour, J. (2009)- Analagous tectonic evolution of the Tethyan and SE Asian regions. Iranian J. Science and Technology, Transactions A, 33, A1, p. 57-64.
(Similar tectonic histories in W Tethys and SE Asia of microcontinents rifting off Gondwana in Devonian-Permian and collisions with Eurasia in Late Triassic, etc.)

Shaw, R.D. (1997)- Some implications of Eurasian and Indo-Australian plate collision on the petroleum potential of Tertiary intracratonic basins of Southeast Asia. In: J.V.C. Howes & R.A. Noble (eds.) Proc. Int. Conference Petroleum Systems of SE Asia & Australia, Jakarta 1997, Indonesian Petroleum Association (IPA), p. 63-80.
(Extensive intra-cratonic rift system within intra-cratonic SE Asia, with >70 Tertiary basins from N Thailand across Gulf of Thailand, SE-wards to Natuna Ridge. It includes significant hydrocarbon provinces (Malay, W Natuna, Pattani, Phitsanulok) and represents transtension along major faults and suture zones. Most rift basins affected by subsequent Miocene and Pliocene transpressional deformation. Onset of rifting tied to Eocene start of India- Eurasia plates collision)

Shen, S.Z. & G.R. Shi (2000)- Wuchiapingian (early Lopingian, Permian) global brachiopod palaeobiogeography: a quantitative approach. Palaeogeogr. Palaeoclim. Palaeoecology 162, 3-4, p. 299-318.
(Late Permian brachiopods five marine biotic province: Cathaysian (tropical), W Tethyan (tropical), Himalayan (warm temperate), Austrazean (cold temperate) and Greenland-Svalbard (cold temperate). Also Cimmerian biogeographical region from Middle East through Afghanistan and Himalayas SE to Shan-Thai terrane and Timor, typified by mix of genera of both Cathaysian and Gondwanan affinities)

Shen, S.Z. & G.R. Shi (2004)- Capitanian (Late Guadalupian, Permian) global brachiopod palaeobiogeography and latitudinal diversity pattern. Palaeogeogr. Palaeoclim. Palaeoecology 208, p. 235-262.
(*Six paleogeographic provinces based on M Permian brachiopods: (A) Greenland-Svalbard (Arctic region), (B) Grandian (W North America), (D) Cathaysian (Paleotethys and Mesotethys), (F) Austrazean (E Australia- New Zealand), and two transitional zones (C) Sino-Mongolian-Japanese (N temperate zone) and (E) Himalayan (S temperate zone) Province. West Timor Aileu-Maubisse assemblages grouped with Lhasa, Chitichun and Zhongba assemblages of S Tibet and Salt Range (Pakistan) in 'Himalayan Province'*)

Shen, S.Z., H. Zhang, Q.H. Shang & W.Z. Li (2006)- Permian stratigraphy and correlation of Northeast China: a review. J. Asian Earth Sciences 26, p. 304-326.
(Review of Permian successions and fossils in NE China. Dominated by brachiopods, fusulinids and land plants, with limited ammonoids, conodonts and bivalves. Guadalupian (M Permian) in Manchuride, Altaid and Yanbian

Belts with bi-temperate Roadian- E Wordian Monodiexodina fauna and late Wordian- Capitanian Codonofusiella- Schwagerina or Neoschwagerina-Yabeina faunas)

Shen, S.Z., H. Zhang, G.R. Shi, W.Z. Li, J.F. Xie, L. Mu & J.X. Fan (2013)- Early Permian (Cisuralian) global brachiopod palaeobiogeography. Gondwana Research 24, p. 104-124.
(Three paleolatitude-related brachiopod paleobiogeographic realms in E Permian. Six provinces distinguished in Asselian: Faunas from Gondwana not well differentiated at province level and form Indoralian province. From Sakmarian large transition zone (S Transitional Zone) between Paleoequatorial and Gondwanan Realms formed, with Austrazean province (E Australia- New Zealand) in E margin of Gondwanaland, contemporaneous with peak of Late Paleozoic Ice (Sakmarian Eurydesma- Bandoproductus-Cimmeriella assemblage, followed by Stereochia, Kasetia, Dyschrestia and Spiriferella faunas). Large Cathaysian province stretching from S China, Iran in W Palaeotethys to Mongolian continent in N. In E Permian cluster analyses Timor group brachiopods closest to Baoshan block in Group D (Southern Transition Zone, with links to paleoequatorial))

Sheng, J.Z. & Y.G. Jin (1994)- Correlation of Permian deposits in China. Palaeoworld 4, p. 14-113.

Shi, G.R. (1998)- Aspects of Permian marine biogeography: a review on nomenclature and evolutionary patterns, with particular reference to the Asian- Western Pacific region. In: Y. Jin. et al. (eds.) Permian stratigraphy, environments and resources 2, Palaeoworld 9, p. 97-112.

Shi, G.R. (2001)- Possible influence of Gondwanan glaciation on low-latitude carbonate sedimentation and trans-equatorial faunal migration: the Lower Permian of South China. In: IGCP Project No. 411 on the Geodynamic Processes of Gondwanaland-derived Terranes in Eastern Asia, Geosciences Journal 5, 1, p. 57-63.
(Early Permian from S China Block with mixed Cathaysian and cold-water Gondwanan brachiopod taxa, widespread rosettes of calcite prisms ('Chrysanthemum stones') and lack of significant reef buildups, suggesting cold water influence in paleo-equatorial S China in E Permian (but ample paleomag data for equatorial setting?). Possibly upwelling of cold water along W coast of S China terrane during E Permian)

Shi, G.R. & N.W. Archbold (1995)- A quantitative analysis on the distribution of Baigendzhinian- Early Kungurian (Early Permian) brachiopod faunas in the western Pacific region. J. Southeast Asian Earth Sciences 11, 3, p. 189-205.
(Cluster analysis of distribution of 222 species of E Permian brachiopods from 25 localities across E Asia-Australia suggest 6 bioprovinces. In SE Asia two provinces (both sub-provinces of Cimmerian terranes): (1) Group B, Shan-Tai/ Sumatra/ W Papua Birds Head (warm temperate to S-subtropical; with Stereochia-Stictozoster) and (2) Group C, Himalayan/ Lhasa/ Timor (S-temperate; with Reedoconcha, Callytharella; also fusulinid Monodiexodina). Notable conclusions: Timor (Maubisse) was southern extension of Lhasa terrane, W Thailand most similar to Birds Head, Sumatra Jambi and Padang faunas similar and grouped with Shan Tai)

Shi, G.R. & N.W. Archbold (1995)- Palaeobiogeography of Kazanian-Midian (Late Permian) western Pacific brachiopod faunas. J. Southeast Asian Earth Sciences 12, p. 129-141.
(*W Timor transitional Cimmerian province between Cathaysian and Gondwanan Realms in M Permian)*

Shi, G.R. & N.W. Archbold (1998)- Permian marine biogeography of SE Asia. In: R. Hall & J.D. Holloway (eds.) Biogeography and geological evolution of SE Asia, Backhuys Publishers, Leiden, p. 57-72.
(Three main Permian biotic provinces in SE Asia: Cathaysian (Simao, Indo-China, E Malaya), Sibumasu (Shan-Tai, Tengchong, Baoshan, W Malaysia, NE Sumatra; until Late Midian when joined Cathaysian province) and short-lived Sakmarian-Asselian Indoralian province)

Shi, G.R., N.W. Archbold & M. Grover (eds.) (1998)- Strzelecki International Symposium on Permian of Eastern Tethys: biostratigraphy, palaeogeography and resources. Proc. Royal Society of Victoria, Melbourne, 110, p. 1-480.

Shi, G.R., N.W. Archbold & L.P. Zhan (1995)- Distribution and characteristics of mixed (transitional) mid-Permian (Late Artinskian-Ufimian) marine faunas in Asia and their palaeogeographical implications. Palaeogeogr. Palaeoclim. Palaeoecology 114, p. 241-271.
(Asia Permian marine biogeography 3 realms: Boreal, Tethyan and Gondwanan. In early E Permian sharp biogeographical boundaries, due to Gondwanan glaciation. In M Permian two transition zones with mixed faunas: (1) North (N China, Japan, etc.), with warm Cathaysian and temperate Boreal genera, (2) South (Arabia, Iran, Shan-Tai, Timor, W Irian Jaya, etc.) with both Gondwanan and Cathaysian elements. Both transition zones have anti-tropically distributed genera like Monodiexodina, Lytvolasma and Spiriferella and are succeeded by Late Permian tropical Tethyan faunas. Timor brachiopods from Sakmarian Maubisse Fm similar to W. Australia, Bitauni late E Permian assemblage mixed Gondwana-Tethyan elements, Late Permian Basleo fauna is 'Tethyan' subtropical-tropical)

Shi, G.R. & T.A. Grunt (2000)- Permian Gondwana-Boreal antitropicality with special reference to brachiopod faunas. Palaeogeogr. Palaeoclim. Palaeoecology 155, p. 239-263.
(Permian marine antitropicality (genera from Boreal and Gondwanan Realms but absent in Paleoequatorial Realm) reported from most marine pelagic or benthic invertebrate groups, suggesting biotic interchanges between Gondwanan and Boreal Realms. Possible migration pathways and mechanisms reviewed: 'stepping-stone' migration via islands in E Paleotethys, migration along W coast of Paleotethys, etc.)

Shi, G.R. & J.B. Waterhouse (1990)- Sakmarian (Early Permian) brachiopod biogeography and constraints on the timing of terane rifting, drift and amalgamation in SE Asia, with reference to the nature of Permian 'Tethys'. Pacific Rim 90 Congress, p. 271-276.

Shi, G.R., J.B. Waterhouse & S. McLoughlin (2010)- The Lopingian of Australasia: a review of biostratigraphy, correlations, palaeogeography and palaeobiogeography. Geological Journal 45, 2-3, p. 230-263.
(Distribution of Lopingian (Late Permian) strata and biota in Australia, New Zealand, Timor and New Caledonia, with new paleogeographic reconstruction. In New Zealand Lopingian beds in several terranes, mainly representing displaced segments of volcanic arcs, fore-arc basins and accretionary complexes, originally located near NE Australia on convergent margin. Most non-marine successions in E Australia rich in coal. Marine Lopingian of W Australia and Timor dominated by carbonates with sparse siliciclastic sediments and volcanoclastics, accumulated in large basin on passive and rifted continental margin, sharing many shallow-marine invertebrate species with Himalayan region of Nepal, S Tibet and N India)

Shi, X., J. Kirby, C. Yu, A. Jimenez-Diaz & J. Zhao (2017)- Spatial variations in the effective elastic thickness of the lithosphere in Southeast Asia. Gondwana Research 42, p. 49-62.
(Maps of spatial variations of Effective elastic thickness for SE Asia from coherence of topography and Bouguer gravity anomaly data. Results suggest E Borneo may share similar crustal basement, and represent broad tectonic zone of destroyed Mesotethys Ocean extending from W-C Java, through E Borneo to N Borneo. Indosinian suture between Indochina and Sibumasu may extend further SE across Billiton to offshore SE Borneo, and Singapore platform and SW Borneo may belong to same block)

Shu, L., M. Faure, B. Wang, X. Zhou & B. Song (2008)- Late Palaeozoic-Early Mesozoic geological features of South China: response to the Indosinian collision events in Southeast Asia. Comptes Rendus Geoscience 340, 2, p. 151-165.
(Late Permian- E Triassic collision of S China- Indosinian blocks along Song Ma-Menglian suture closed Paleo-Tethys Ocean, caused folding and thrusting and granitic magmatism in S China Block (SCB). E and C parts of SCB SW-dipping paleoslope in Late Paleozoic-Early Mesozoic. Ophiolitic melanges of E SCB formed in Neoproterozoic, not Permian or Triassic (Neoproterozoic oceanic relics with Proterozoic acritarchs). M-U Triassic granitoids (235-205 Ma) belong to post-collision peraluminous S-type granites)

Shu, L.S., X.M. Zhou, P. Deng, B. Wang, S.Y. Jiang, J.H. Yu & X.X. Zhao (2009)- Mesozoic tectonic evolution of the Southeast China Block: new insights from basin analysis. J. Asian Earth Sciences 34, p. 376-391.

(On SE China Block two types of Mesozoic basins (1) Late Triassic- E Jurassic post-Indosinian orogenic basins and (2) M Jurassic- Cretaceous intracontinental extensional graben and half-graben basins. Modern basin and range framework was settled down in Cretaceous. In Late Triassic–Early Jurassic sediment source areas were to N and NE of outcrop region)

Silberling, N.J. (1985)- Biogeographic significance of the Upper Triassic bivalve *Monotis* in Circum-Pacific accreted terranes. In: D.G. Howell (ed.) Tectonostratigraphic terranes of the Circum-Pacific region, Circum-Pacific Council Energy and Mineral Resources, Houston, p. 63-70.
(Five biogeogeographic areas in Circum-Pacific region, based on Late Triassic thin-shelled bivalve Monotis. In SE Asia: (1) Bipolar fauna C (Monotis subcircularis + Eomonotis + Entomonotis ochotica) in E Asia, Japan, NW Borneo; (2) Fauna E (Monotis salinaria) in Tethyan rocks of Alpine- Himalayan belt and Banda Sea region (Timor, Seram?)

Silver, E.A. & R.B. Smith (1983)- Comparison of terrane accretion in modern Southeast Asia and the Mesozoic North American Cordillera. Geology (GSA) 11, p. 198-202.
(Indo-Pacific region from Tonga Trench to E Indonesia proposed as analog with tectonic setting of North American Cordillera, which is also composed of numerous suspect terranes)

Simpson, G.G. (1977)- Too many lines; the limits of the Oriental and Australian zoogeographic regions. Proc. American Philosophical Society 121, p. 107-120.
(Critical discussion of the multiple proposed biogeographic boundaries between Oriental/Asian and Australian zoogeographic regions (Muller Line, Wallace Line, Murray Line, Huxley Line, Weber Line, Lydekker Line, etc.))

Smith, A.B. (1988)- Late Palaeozoic biogeography of East Asia and palaeontological constraints on plate tectonic reconstructions. Philosophical Transactions Royal Society London, A, 326, p. 189-227.
(Biogeographic patterns of Carboniferous- Permian rugose corals of E Asia. In Carboniferous Cathaysian region one cohesive block (N and S China, Tarim, Kunlun, Qiangtang teranes), lying tropically or subtropically, biotically isolated from C Asia. S boundary of Cathaysian region does not coincide with single suture, nor sharply defined: gradual faunal impoverishment S-ward across Tibetan Plateau, implying faunal ranges controlled by prevailing climate, not by geographical barrier ('Paleotethys'). Region formed part of Gondwanaland craton, extending into tropical latitudes until separation in late Lower Permian)

Srivastava, A.K. & D. Agnihotri (2010)- Dilemma of Late Palaeozoic mixed floras in Gondwana. Palaeogeogr. Palaeoclim. Palaeoecology 298, p. 54-69.
(Carboniferous and Permian plant assemblages of N and S hemispheres distributed in four floral provinces. Mixed M and U Permian Cathaysian- Gondwanan floras from margins of Paleo-Tethys, i.e. New Guinea, Tibet, Kashmir, Oman, Jordan, etc. No clear explanation)

Srivastava, A.K., V.A. Krassilov & D. Agnihotri (2010)- Peltasperms in the Permian of India and their bearing on Gondwanaland reconstruction and climatic interpretation. Palaeogeogr. Palaeoclim. Palaeoecology 310, p. 393-399.
(First find of peltasperms in Permian of Gondwana, in Lower Permian Barakar Fm of Satpura Basin, C India, where they co-occur with diverse glossopterids. These are dominant group of N American- European arboreal vegetation and suggest floristic exchanges between Laurasia and Gondwana. Satpura occurrence assigns Indian subcontinent to low-latitude zone of mixed Laurasian/Gondwanan floristic assemblages)

Stait, B. & C. Burrett (1987)- Biogeography of Australian and Southeast Asian Ordovician nautiloids. In: G.D. McKenzie (ed.) Gondwana Six: stratigraphy, sedimentology and paleontology, American Geophysical Union (AGU), Geophysical Monograph 41, p. 21-28.
(E Ordovician faunas of SE Asia Sibumasu plate similar to those of Canning Basin, NW Australia)

Stampfli, G.M. (2000)- Tethyan Oceans. In: E. Bozkurt et al. (eds.) Tectonics and magmatism in Turkey and the surrounding area. Geological Society, London, Special Publ. 173, p. 1-23.

(Ordovician- Permian plate reconstructions of early Tethyan oceans (focused on W Tethys). Paleotethys opened in Ordovician-Silurian, with detachment of ribbon-like Hun Superterrane along Gondwana margin. Neotethys opened from Late Carboniferous- late E Permian from Australia- E Mediterranean, with drifting of Cimmerian superterrane and final closing of Paleotethys in M Triassic. N-ward subduction of Paleotethys triggered opening of back-arc oceans along Eurasian margin. Some closed during Eocimmerian collisional event, others stayed open and their delayed subduction induced opening of younger back-arc oceans (Black Sea, etc.). Subduction of Neotethys mid-ocean ridge responsible for major change in Jurassic plate tectonics)

Stampfli, G.M. & G.D. Borel (2002)- A plate tectonic model for the Paleozoic and Mesozoic constrained by dynamic plate boundaries and restored synthetic oceanic isochrons. Earth Planetary Science Letters 196, p. 17-33.
(online at: https://www.sciencedirect.com/science/article/pii/S0012821X0100588X)
(Ordovician- Cretaceous reconstructions of greater Tethyan realm)

Stampfli, G.M., C. Hochard, C. Verard, C. Wilhem & J. von Raumer (2013)- The formation of Pangea. Tectonophysics 593, p. 1-19.
(New Neoproterozoic- Triassic global reconstructions, with latest Neoproterozoic creation of Gondwana, Devonian opening of Paleotethys, Carboniferous Variscan orogeny along W Paleotethys and creation of Pangea super-continent. E of Spain Paleotethys remained open until Triassic, subducting N under Laurasia. Rollback of Paleotethyan slabbed caused Permian rifts/ backarc basins, some becoming oceanized in Triassic. End-Triassic breakup of Pangea and opening of Alpine- Tethys oceanic seaways)

Stauffer, P.H. (1974)- Malaya and Southeast Asia in the pattern of continental drift. Bull. Geological Society Malaysia 7, p. 89-138.
(online at: https://gsmpubl.files.wordpress.com/2014/09/bgsm1973026.pdf)
(Review of early plate tectonic models of SE Asia)

Stauffer, P.H. (1978)- Anatomy of the Australasian tektite strewnfield and the probable site of its crater. In: P. Nutalaya (ed.) Proc. 3rd Regional Conference Geology and Mineral Resources of SE Asia (GEOSEA III), Bangkok, p. 285-289.
(Most likely location of Pleistocene impact crater that created large tektite fields is under Mekong River Delta. On Malay Peninsula, in Gambang tin field, tektites at base of lower tin-bearing 'Old Alluvium')

Stauffer, P.H. (1983)- Unravelling the mosaic of Paleozoic crustal blocks in Southeast Asia. Geologische Rundschau 72, 3, p. 1061-1080.
(Many parts of SE Asia have Paleozoic or older continental crust. Ophiolite belts indicate mosaic of different blocks. If Permian pebbly mudstones are glacial deposits much of SE Asia was attached to Gondwana and rifting-separation took place after Permian)

Stauffer, P.H. (1985)- Continental terranes in Southeast Asia: pieces of which puzzle ? In: D.G. Howell (ed.) Tectonostratigraphic terranes of the Circum-Pacific region, Circum-Pacific Council for Energy and Min. Res., Houston, Earth Science Series 1, p. 529-539.
(Continental crust under much of pre-Tertiary core of SE Asia. Late Paleozoic glacial marine deposits in W SE Asia indicate attachment to Gondwana in Permian)

Stauffer, P.H. & D.J. Gobbett (1972)- Southeast Asia a part of Gondwanaland? Nature 240, 102, p. 139-140.
(Brief discussion of Ridd (1971) and Tarling (1972) reconstructions)

Stephenson, M.H. & L. Angiolini (2006)- Relating the fossil record to deglaciation in the early Permian of Gondwana: development of a Gondwana-wide biotic deglaciation model. Permophiles 47, p. 18. *(Abstract only)*
(Maximum rate of deglaciation around time of Granulatisporites confluens Oppel-zone in late Asselian-early Sakmarian time)

Stephenson M.H., L. Angiolini & M.J. Leng (2007)- The Early Permian fossil record of Gondwana and its relationship to deglaciation; a review. In: M. Williams et al. (eds.) Deep-time perspectives on climate change: marrying the signal from computer models and biological proxies, Geological Society London, p. 169-189.
(manuscript online at: https://nora.nerc.ac.uk/id/eprint/4580/1/Stephenson_JGS_deglac.pdf)
(Biotic criteria for E Permian deglaciation sequences in Gondwana. Marine cold-water bivalves Eurydesma and Deltopecten and brachiopods Lyonia and Trigonotreta in earliest post-glacial marine transgressions, replaced by more diverse, temperate fauna. Palynomorph succession changes from monosaccate pollen assemblages, associated with fern spores, to more diverse assemblages with common bisaccate pollen. Organic matter shows decreasing d13 C trend, believed to be due to post-glacial global warming. E Permian O isotopes show d18O decline in Asselian- Artinskian, likely due to melting of glaciers at high latitudes)

Stern, R.J., Shi-Min Li & G.R. Keller (2018)- Continental crust of China: a brief guide for the perplexed. Earth-Science Reviews 186, p. 72-94.
(Useful review of crustal architecture of China. Three major Precabrian cratonic blocks: Proterozoic South China, Paleoproterozoic North China and Archean Tarim cratons, surrounded by Paleozoic and Mesozoic accreted terranes)

Stevens, C.H. (1985)- Reconstruction of Permian paleogeography based on distribution of Tethyan faunal elements. Proc. 9th Int. Congress of Carboniferous Stratigraphy and Geology, Washington 1979, 5, p. 383-393.

Stevens, G.R. (1963)- Faunal realms in Jurassic and Cretaceous belemnites. Geological Magazine 100, 6, p. 481-497.
(Three faunal realms recognized for Jurassic and Cretaceous belemnites. Boreal and Tethyan realms for Jurassic ammonites, but no equivalent for Pacific. They apparently are divided, partly in the Boreal and partly in the Indo-Pacific. Boundary between Boreal and Tethyan realms was distinct and stable, boundary between Tethyan and Indo-Pacific realms varied considerably in Upper Jurassic and Lower Cretaceous)

Stevens, G.R. (1977)- Mesozoic biogeography of the South-West Pacific and its relationship to plate tectonics. In: Int. Symposium Geodynamics in South-West Pacific, Noumea 1976, Technip, Paris, p. 309-326.

Stevens, G.R. (1980)- Southwest Pacific faunal palaeobiogeography in Mesozoic and Cenozoic times: a review. Palaeogeogr. Palaeoclim. Palaeoecology 31, p. 153-196.
(Review of faunal provinciality of SW Pacific (focus on New Zealand- New Caledonia). In late Middle- Late Jurassic region received repeated waves of benthic immigrants from Tethyan/Indo-Pacific region, etc.)

Stonely, R. (1974)- Evolution of the continental margins bounding a former southern Tethys. In: C.A. Burk & C.L. Drake (eds.) The geology of continental margins, Springer Verlag, New York, p. 889-903.
(Early interpretation of S part of Tethyan orogenic belt, from Mediterranean Sea to Indonesia)

Sun, D.L. (1993)- On the Permian biogeographic boundary between Gondwana and Eurasia in Tibet, China as the eastern section of the Tethys. Palaeogeogr. Palaeoclim. Palaeoecology 100, p. 59-77.
(Mainly on China terranes; no mention of Timor. Glossopteris flora, bivalve Eurydesma, rugose coral Lytvolasma, brachiopod Globiella and fusulinid Monodiexodina are cool climate flora/fauna, often occurring with tillites along N margin of Gondwanaland in E Permian. In late M Permian Gondwana Tethys became still warmer and warm tropical fauna of Neoschwagerina and Verbeekina replaced cool water one

Sun, J., X. Ni, S. Bi, W. Wu, J. Ye, J. Meng & B.F. Windley (2014)- Synchronous turnover of flora, fauna, and climate at the Eocene–Oligocene boundary in Asia. Nature Scientific Reports 4, 1, p. 1-6.
(online at: https://www.nature.com/articles/srep07463)
(Eocene-Oligocene Boundary (~34 Ma) marks one of largest extinctions of marine and mammalian fauna in in Cenozoic. New magnetostratigraphy, pollen and climatic proxies in Asian interior across Eocene–Oligocene boundary show climate change forced a turnover of flora and fauna, including change from large perissodactyl-dominant land mammal fauna in warm-temperate forests to small rodent/lagomorph fauna in dry-temperate forest-steppe. To date, still lack of evidence for dramatic uplift of Tibetan Plateu at 34 Ma)

Sun, X., M. Zheng, T. Pei, P. Hollings, X. Si, R. Zhang & J. Deng (2025)- Reassessing the spatial and temporal evolution of the Southeast Asian Tin Belt: Insights into recurrent tin mineralization. Earth-Science Reviews 270, 105233, p.
(SE Asia Tin Belt with six discrete episodes of tin mineralization from Permian -Miocene. (1) Permian (~290-260 Ma) deposits in E Malaysia associated with granites E of Paleo-Tethys suture zone, (2) Triassic (~230–200 Ma) deposits within Main Range Province on both sides of Paleotethys suture, from Indonesia, Malaysia, Thailand to SW China. (3) Late Cretaceous- Cenozoic (mainly 90-40 Ma) deposits in Western Province hosted by granites in Sibumasu-Baoshan-Tengchong Block. Tin also in W Yunnan, etc. Tin mineralization across SETB reflects episodic remelting of long-lived Proterozoic-E Paleozoic metasedimentary crust, episodically triggered during successive subduction– collision cycles of Paleo-, Meso-, and Neo-Tethys oceans and India-Asia collision)

Talent, J.A. (1984)- Australian biogeography past and present: determinants and implications. In: J.J.Veevers (ed.) Phanerozoic Earth history of Australia, Oxford Monographs Geology Geophysics 2, Clarendon Press, Oxford, p. 57-93.
(In Permian most of Australia in cold Gondwana realm (Glossopteris flora), but N edge intruded into warm Tethyan realm (Bonaparte Gulf, Timor, New Guinea; temporary extension of Cathaysian Gigantopteris flora into W New Guinea. Late Triassic mollusc fauna of Jimi River/PNG no species in common with contemporaneous faunas from Misool, Seram, Timor, suggesting some paleobiogeographic boundary between these, although all are supposedly in warm-water Tethyan realm)

Talent, J.A., R. Manson, J.C. Aitchison, R.T. Becker et al. (2000)- Devonian palaeobiogeography of Australia and adjoining regions. Mem. Assoc. Australian Palaeont. 23, p. 167-257.
(Summaries of Devonian fossil groups in Australia. No maps)

Tan, B.K. (1996)- 'Suture zones' in peninsular Malaysia and Thailand: implications for palaeotectonic reconstruction of southeast Asia. J. Southeast Asian Earth Sciences 13, p. 243-249.
(Correlating geological belts/ suture zones from N Thailand to S Peninsular Malaysia very difficult)

Tan, D.N.K. (1983)- Cherts of Southeast Asia. In: A. Iijima et al. (eds.) Siliceous deposits in the Pacific Region, Developments in Sedimentology 36, Elsevier, p. 79-91.
(Lower Paleozoic chert confined to peninsular Thailand and NW and C Peninsular Malaysia. Upper Paleozoic chert in Thailand, Indochina, and Peninsular Malaysia, with isolated occurrence in W Sarawak. Triassic chert in N Thailand, N Peninsular Malaysia, Singapore, Sumatra, Bangka, Sarawak, and N Palawan. Jurassic-Cretaceous chert in SE and NE Kalimantan, S and W Sumatra, C Java, S Sulawesi, Natuna, Sarawak, Sabah and Philippines (but not Thailand, Indochina, and Peninsular Malaysia). Tertiary age chert or older blocks in Tertiary melange in Indonesia (Nias, Timor, Philippines, Sarawak and Sabah)

Tapponnier, P., G. Peltzer, A.Y. LeDain & R. Armijo (1982)- Propagating extrusion tectonics in Asia: new insights from simple experiments with plasticine. Geology (GSA) 10, p. 611-616.
(Interesting and popular, but disputed tectonic model explaining major strike slip zones and blocks rotations in SE Asia as results of India- Asia collision in Eocene)

Tapponnier, P., G. Peltzer & R. Armijo (1986)- On the mechanics of the collision between India and Asia. In: M.P. Coward & A.C. Ries (eds.) Collision tectonics, Geological Society, London, Special Publ. 19, p. 115-157.
(Extended and updated version of SE Asia extrusion model. Since Eocene large prograding zone of deformation migrated across Asia, concurrently with N-ward movement of India collision front. Several large left-lateral strike-slip faults activated. In first 20-30 Ma of collision process, India may have pushed sideways S part of Sundaland (incl. SW Borneo, Sumatra and Peninsular Malaysia) then all of Sundaland (incl. S Yunnan, Indochina, Thailand and Shan Plateau. Red River Fault may have taken up 800-1000 km of extrusion to SE. In Oligocene- E Miocene Sundaland would have rotated clockwise by ~20-25°)

Tarling, D.H. (1988)- Gondwanaland and the evolution of the Indian Ocean. In: M.G. Audley-Charles & A. Hallam (eds.) Gondwana and Tethys, Geological Society, London, Special Publ. 37, p. 61-77.

Teasdale, J. & J. Bon (2017)- A new plate model for South East Asia aimed at understanding basin evolution. Proc. SE Asia Petroleum Exploration Society (SEAPEX) Conference 2017, Singapore, Session 7, p. 1-15. *(Abstract + Presentation)*
(Eight SE Asia plate reconstruction models from 55- 0 Ma. SW Borneo and Peninsular Malaysia part of same rigid Sundaland basement terrane. 'Rotational extrusion' of Sundaland caused clockwise rotation of Sundaland + Borneo in two phases in Late Eocene and Oligocene. Counter-clockwise rotation of Bird's Head. E Indonesian 'salami-slicer' extends NW to Borneo, where it accounts for M Miocene Sabah Orogeny. Etc.)

Teichert, C. (1951)- The marine Permian faunas of Western Australia. Palaeont. Zeitschrift 24, 1-2, p. 75-90.
(W Australian Permian faunas more in common with Tethys than with E Australia. Timor faunas appear related, but significant differences. One record of fusulinid foraminifera in Desert Basin could not be relocated and is probably erroneous. Low diversity coral fauna, mainly indigenous with Australian species. Crinoid faunas related to Timor, but much impoverished)

Teichert, C. (1974)- Marine sedimentary environments and their faunas in Gondwana area. In: Plate Tectonics-assessments and reassessments, American Assoc. Petroleum Geol. (AAPG), Memoir 23, p. 361-394.
(Widespread Paleozoic-Mesozoic marine rocks in W Australia, S Africa Antarctica, etc., inconsistent with hypothesis of Gondwanaland (?))

Tingay, M., C. Morley, R. King, R. Hillis & D. Coblentz (2009)- Southeast Asian stress map: implications for petroleum exploration and production. First Break 27, p. 81-88.
(Overview of new SE Asian Stress Map, with stress information from borehole breakouts, drilling-induced fractures, and focal mechanism solutions across 14 provinces in SE Asia. Intraplate stress field of SE Asia (Sundaland) is variable and not aligned with absolute plate motion)

Tingay, M., C. Morley, R. King, R. Hillis, D. Coblentz & R. Hall (2010)- Present-day stress field of Southeast Asia. Tectonophysics 482, p. 92-104.
(Variable stress pattern throughout SE Asia largely inconsistent with Sunda plate ESE motion direction. Present-day maximum horizontal stress in Thailand, Vietnam and Malay Basin predominately N-S, consistent with radiating stress patterns from E Himalayan syntaxis. Maximum horizontal stress in Borneo primarily NW–SE; may reflect plate-boundary forces or topographic stresses exerted by C Borneo highlands. S and C Sumatra basins maximum horizontal stress NE–SW, perpendicular to Indo-Australian subduction front. Plate-scale stress field in SE Asia controlled by combination of Himalayan-related deformation, subduction forces (trench suction, collision) and intraplate sources of stress such as topography and basin geometry)

Tjia, H.D. (2008)- Tertiary stress regimes of western Southeast Asia. In: J.A. Katili et al. (eds.) Tectonics and resources of Central and SE Asia (Halbouty volume), Pusat Survei Geologi, Bandung, Special Publ. 34, p. 125-138.
(In W SE Asia pre-Middle Miocene mainly extensional regimes. Changes in plate dynamics towards end E Miocene terminated spreading of S China Sea and Philippines basins and allowed impact of W-directed Pacific convergence. After short transition in Langhian (16.3-14.2 Ma) start of compressional regimes)

Tollman, A. & E. Kristan-Tollman (1985)- Paleogeography of the European Tethys from Paleozoic to Mesozoic and the Triassic relations of the Eastern part of the Tethys and Panthalassa. In: K. Nakazawa & J.M. Dickens (eds.) The Tethys, her paleogeography and paleobiology, from the Paleozoic to the Mesozoic, Tokai University Press, Japan, p. 3-22.
(The concept of 'Tethys' was introduced by Austrian geologist Eduard Suess (1893, 1901), as "a great ocean that once stretched across Eurasia", as far East as Timor)

Tong-Dzuy, T., H.F. Hou, T.H. Phuong, H.H. Nguyen et al. (1996)- Outlines of stratigraphy and remarks on paleobiography of Devonian in Southeast Asia. Proc. IGCP Symposium on Geology of SE Asia, Hanoi 1995, Journal of Geology, Hanoi, B, 1996, 7-8, p. 10-34.

(Review of Devonian stratigraphies and macrofaunas of S China, Indochina W Malaysia. Lower Devonian in most places marine clastics, M Devonian mainly carbonates. Devonian faunas of SE Asa greater similarities with Europe than with Australia, questioning common wisdom that this region was derived from Gondwana)

Tong-Dzuy, T., P. Janvier & P. Ta Hoa (1996)- Fish suggest continental connections between South China and Indochina blocks in Middle Devonian times. Geology (GSA) 24, 6, p. 571-574.
(Yunnanolepiform antiarch (placoderm fish) from Givetian Dong Tho Fm, C Vietnam, on Indochina Block, well S of Song Ma suture. Previously known only from Lower Devonian of South China block. Massive sandstones of Dong Tho Fm may be southern extension of Do Son Sst of Hai Phong area, S China)

Torsvik, T.H. & L.R.M. Cocks (2004)- Earth geography from 400 to 250 Ma: a palaeomagnetic, faunal and facies review. J. Geological Society, London 161, 4, p. 555-572.

Torsvik, T.H. & L.R.M. Cocks (2009)- The Lower Palaeozoic palaeogeographical evolution of the northeastern and eastern peri-Gondwanan margin from Turkey to New Zealand. In: M.G. Bassett (ed.) Early Palaeozoic peri-Gondwana terranes: new insights from tectonics and biogeography, Geological Society, London, Special Publ. 325, p. 3-21.
(Review of E Paleozoic of NE sector of Gondwanan and peri-Gondwanan margin from Turkey through Middle East, N Indian subcontinent, S China- SE Asia, to Australia and New Zealand. SE Australia enlarged through accretion of island arcs. Most of area represented passive margin. Paleotethys opened no earlier than Late Silurian. N China and others probably not attached to Gondwana in Lower Paleozoic. S China close to Gondwana, but not part of it, and Sibumasu probably part of Gondwana. New paleogeographical maps for Cambrian (500 Ma), Ordovician (480 Ma) and Silurian (425 Ma))

Torsvik, T.H. & L.R.M. Cocks (2013)- Gondwana from top to base in space and time. Gondwana Research 24, p. 999-1030.
(Review of evolution of Gondwana supercontinent, from unification of several cratons in Late Neoproterozoic, combination with Laurussia in Carboniferous to form Pangea, to progressive fragmentation in Mesozoic. New paleogeographic reconstructions from E Cambrian (540 Ma) to 200 Ma. Sibumasu microcontinent stretches from Burma and Yunnan to Sumatra (unlike earlier Cocks-Fortey papers, now accepted to have been part of E Gondwana craton adjacent to NW Australia, until opening of Neotethys Ocean in Permian)

Toyokuni, G., D. Zhao & K. Kurata (2022)- Whole-mantle tomography of Southeast Asia: new insight into plumes and slabs. J. of Geophysical Research: Solid Earth 127, 11, e2022JB024298, p. 1-29.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/pdf/10.1029/2022JB024298)
(3-D tomographic images of P wave velocity structure of mantle beneath SE Asia and surrounding regions, from 23,587 earthquakes. Continuous low-V zone from surface to core-mantle boundary beneath Hainan hotspot, reflecting Hainan plume. Beneath Australian slab subducted into lower mantle, low-V anomaly may reflect subslab hot mantle upwelling due to return flow of slab subduction. Subducted slabs present in upper mantle and slab remnants in lower mantle. Hole in subducting Australian slab at depths of 280-460 km below E Java (first noticed by Hall & Spakman, 2015). Slab hole, with mixture of island arc magma and hot mantle upwelling, may have caused huge eruptions of Tambora and Rinjani volcanoes at E end of slab hole)

Tozer, E.T. (1982)- Marine Triassic faunas of North America: their significance for assessing plate and terrane movements. Geologische Rundschau 71, 8, p. 1077-1104.
(Marine Triassic paleobiogeography. Norian 'Tethyan/ low paleolatitude' Monotis salinaria in Hallstatt facies of Timor, 'Pacific/ mid-high paleolatitude' Monotis ochotica in New Caledonia, New Zealand, etc.)

Truswell, E.M. (1981)- Pre-Cenozoic palynology and continental movements. In: M.W. McElhinny & D.A. Valencio (eds.) Paleoreconstruction of the continents, American Geophysical Union (AGU) Geodynamics Series 2, p. 13-25.

Truswell, E.M., P.A. Kershaw & I.R. Sluiter (1987)- The Australian-Malaysian connection: evidence from the paleobotanical record. In: T.C. Whitmore (ed.) Biogeographical evolution of the Malay Archipelago, Oxford Monographs Biogeography 4, Oxford University Press, p. 32-49.

Twidale, C.R. (2005)- Granitic terrains. In: A. Gupta (ed.) The physical geography of Southeast Asia, Oxford University Press, p. 123-141.
(Basic review of granitic rocks, weathering and distribution in SE Asia)

Ueno, K. (1999)- Gondwana/Tethys divide in East Asia: solution from Late Paleozoic foraminiferal paleobiogeography. In: B. Ratanasthien & S.L. Rieb (eds.) Proc. Int. Symposium Shallow Tethys (ST) 5, Chiang Mai 1999, Dept. of Geological Science, Chiang Mai University, p. 45-54.. *(ST5 book online at: https://library.dmr.go.th/elib/cgi-bin/opacexe.exe?op=mmvw&db=Main&skin=S&mmid=19206&bid=17374)*
(Review of main Gondwanan (Sibumasu, etc.) versus Tethyan (Indochina, etc.) terranes in Late Paleozoic)

Ueno, K. (2000)- Permian fusulinacean faunas of the Sibumasu and Baoshan Blocks: implications for the paleogeographic reconstruction of the Cimmerian continent. Geosciences Journal 4 (Special Edition), p. 160-163.
(Expanded version see Ueno (2003) below)

Ueno, K. (2002)- Geotectonic linkage between West Yunnan and mainland Thailand: Toward the unified geotectonic evolution model of East Asia. In: Geodynamic Processes of Gondwanaland-derived terranes in East and Southeast Asia, their crustal evolution, emplacement and natural resources potential, Fourth Symposium IGCP Project 411, Phitsanulok, p. 35-42.

Ueno, K. (2003)- The Permian fusulinoidean faunas of the Sibumasu and Baoshan blocks: their implications for the paleogeographic and paleoclimatologic reconstruction of the Cimmerian Continent. Palaeogeogr. Palaeoclim. Palaeoecology 193, p. 1-24.
(Permian fusulinids in four levels in Baoshan and Sibumasu Blocks. East Cimmerian continent poor Tethyan neoschwagerinid and verbeekinid genera in M Permian. Increase in diversity from E to late M Permian (N-ward drift of Cimmerian continent) and from E to W (W Cimmerian closer to tropical Tethyan domain than E). M Permian Cimmerian two subregions: W= Tethyan Cimmerian and E= Gondwanan Cimmerian. Rare Tethyan fusulinids in Baoshan and Sibumasu blocks suggests E Cimmerian continent still far from Cathaysian domain and in warm temperate- subtropical zone until end-Permian. E Cimmerian block migrated into tropical zone by Late Triassic with Carnian sponge-coral buildups in Sibumasu Block)

Ueno, K. (2006)- The Permian antitropical fusulinoidean genus *Monodiexodina*: distribution, taxonomy, paleobiogeography and paleoecology. J. Asian Earth Sciences 26, p. 380-404
(online at: https://www.academia.edu/15355494/The_Permian_antitropical_fusulinoidean_genus_Monodiexodina_Distribution_taxonomy_paleobiogeography_and_paleoecology)
(Review of 'subtropical', late E Permian fusulinid genus Monodiexodina from 33 areas, incl. several Timor occurrences, all in middle part of Maubisse Fm. Type species of Monodiexodina is Schwagerina wanneri Schubert 1915 first described from Timor. Monodiexodina-bearing areas can be restored to either N or S middle latitudes, suggesting genus is paleobiogeographically anti-tropical taxon. Generally found in monotypic, crowded manner in sandy sediments with uni-directionally aligned shells. Long-ranging 'mid-Permian', Artinskian- E Midian (=Capitanian))

Ueno, K., A. Miyahigashi & T. Charoentitirat (2010)- The Lopingian (Late Permian) of mid-oceanic carbonates in the Eastern Palaeotethys: stratigraphical outline and foraminiferal faunal succession. Geological Journal 45, p. 285-307.
(SW China Changning-Menglian Belt and N Thailand Inthanon Zone best-studied Paleotethys collisional belts in Asia. Thick E Carboniferous- Late Permian carbonate build-ups with basalt at base formed on top of oceanic seamounts. Foraminiferal faunas record shallow-marine domain in Paleotethys (Cathaysian Province) with high diversity fusulinids. Coeval Neotethyan domain also high diversity fusulinids. Lopingian Panthalassan mid-oceanic build-ups likely lower foraminiferal diversity than Paleo- and Neotethys)

Uhlig, V. (1911)- Die marinen Reiche des Jura und der Unterkreide. Mitteilungen der Geologischen Gesellschaft in Wien, 4, 3, p. 389-448.
(online at: https://www.zobodat.at/pdf/MittGeolGes_4_0329-0448.pdf)
('The marine realms of the Jurassic and the Lower Cretaceous'. Subdivision of Jurassic- Cretaceous into 5 main faunal provinces. Includes review of Indonesian Mesozoic macrofossils known at that time, all classified in 'III.Himalayan Province', whch stretches from Tibet to Indonesia and New Guinea,and possibly into New Zealand. Common deep-water faunas with Liassic dominated by ammonite Phylloceras, Dogger characterized by ammonites Stephanoceras and Macrocephalites. With one map og global distribution of bioprovinces)

Umbgrove, J.H.F. (1929)- Tertiary sea connections between Europe and the Indo-Pacific area. Proc. 4th Pan-Pacific Science Congress, Java 1929, 2A, p. 91-104.

Unesco (1972)- Geological map of Asia and the Far East 1:5 Million; Explanatory note, 2nd edition, Unesco, Paris, p. 1-100.
(online at: https://unesdoc.unesco.org/ark:/48223/pf0000133205)

United Nations- ESCAP (1978)- Stratigraphic correlation between sedimentary basins of the ESCAP region, vol. 5, ESCAP Atlas of Stratigraphy I, Burma, Malaysia, Thailand, Indonesia, Philippines. U.N. Mineral Resources Development Series 44, p. 1-58 + many plates.
(online at: https://repository.unescap.org/items/bb52a31d-ca39-4fad-9391-ad4d1b7df8a7)
(Summaries of regional stratigraphy and correlations of SE sian basins)

Uno, K., K. Furukawa & S. Hada (2011)- Margin-parallel translation in the western Pacific: paleomagnetic evidence from an allochthonous terrane in Japan. Earth Planetary Science Letters 303, 1-2, p. 153-161.
(Paleomagnetic study shows latitudinal translation of allochthonous Kurosegawa ribbon continent of Japan along W margin of Pacific Ocean. Terrane was at 4°N paleolatitude in Late Triassic, 18°N in E Cretaceous, then translated ~1500km N to present position, associated with sinistral strike-slip along E Asian continental margin, in Mid-Late Cretaceous. Also show SW Borneo plate in Equatorial position since Jurassic)

Uno, K., K. Hisada, K. Ueno, Y. Kamatad, H. Hara, M. Fujikawa et al. (2010)- Paleomagnetic evidence for latitudinal change of the Indochina Block during the Late Paleozoic to Mesozoic. In: C.P. Lee et al. (eds.) 6th Symposium Int. Geological Correlation Program, Project 516 (IGCP516), Geological anatomy of East and South Asia, Kuala Lumpur 2010, p. 26. *(Abstract only)*
(Paleomagnetic paleolatitude calculated for samples from around Loei, Thailand (17.6°N), suggest W Indochina Block was at 9°N or 9°S in E Permian and at 5°N or 5°S in Carboniferous. Two tectonic models conceivable. Most likely Indochina Block was near equator in Carboniferous and N-motion of block lasted through Permian)

Usuki, T., C.Y. Lan, K.L. Wang & H.Y. Chiu (2013)- Linking the Indochina block and Gondwana during the Early Paleozoic: evidence from U-Pb ages and Hf isotopes of detrital zircons. Tectonophysics 586, p. 145-159.
(online at: www.academia.edu/13912929/Linking_the_Indochina_block_and_Gondwana_during_the_Ea Etc.)
(Detrital zircons from river sediment in Truong Son Belt of Indochina block in N-C Vietnam with mainly Neoarchean (~2.5 Ga), Mesoproterozoic (1.7-1.4 Ga), Grenvillian (~0.95 Ga) and Pan-African (0.65-0.5 Ga) ages. Similarity of age distribution and Hf isotope compositions of Indochina and those of Tethyan Himalaya, W Cathaysia, and Qiangtang suggests Indochina was outboard of Qiangtang and S of S China along Indian margin of Gondwana in E Paleozoic. Results consistent with paleontological correlations of E Gondwana margin)

Van Balgooy, M.M.J. (1987)- A plant geographic analysis of Sulawesi. In: T.C. Whitmore (ed.) Biogeographical evolution of the Malay Archipelago, Clarendon Press, Oxford, p. 94-102.
(Discussion of modern plant biogeography of Sulawesi by Indonesian botanist Max van Balgooy, who studied under Prof. C.G.G.J. van Steenis in Leiden)

Van de Lagemaat, S.H.A. (2023)- Junction jigsaw: Reconstructing the plate tectonic puzzle from the Panthalassa to the Tethys realm. Ph.D. Thesis, University of Utrecht, Utrecht Studies in Earth Sciences 288, p. 1-441.
(online at: https://dspace.library.uu.nl/handle/1874/431449)
(Collection of papers published elsewhere in 2018-2023)

Van de Lagemaat, S.H.A., L. Cao, J. Asis, E. Advokaat, P. Mason, M.J. Dekkers & D.J.J. van Hinsbergen (2023)- Causes of Cretaceous subduction termination below South China and Borneo: was the Proto-South China Sea underlain by an oceanic plateau? Geoscience Frontiers 15, 2, 101752, p. 1-25.
(online at: https://www.sciencedirect.com/science/article/pii/S1674987123002190)
(China, Indochina and Borneo margins around S China Sea contain long-lived magmatic arcs that became inactive at ~85 Ma, even though embayment of oceanic crust ('Proto-South China Sea') remained in intervening region. Mesozoic subduction below S China and Borneo probably stopped when a Paleo-Pacific oceanic plateau entered trench)

Van de Lagemaat, S.H.A. & D.J.J. van Hinsbergen (2023)- Plate tectonic cross-roads: Reconstructing the Panthalassa-Neotethys junction region from Philippine Sea Plate and Australasian oceans and orogens. Gondwana Research 126, p. 129-201.
(online at: https://www.sciencedirect.com/science/article/pii/S1342937X23002617)
(Discovery of new, now mostly subducted large tectonic plate in Junction Region between Panthalassa and Tethys realms. Molucca Sea Plate formed as Eocene back-arc basin behind N-dipping subduction zone that consumed Australian oceanic lithosphere. Jurassic oceanic crust preserved in Philippines (Palawan?) originated from N Australian margin when back-arc basin formed. Etc.)

Van der Meer, D.G., W. Spakman, D.J.J. van Hinsbergen, M.L. Amaru & T.H. Torsvik (2010)- Towards absolute plate motions constrained by lower-mantle slab remnants. Nature Geoscience 3, p. 36-40.
(Global mantle tomography model used to estimate longitude of past oceanic subduction zones. Identified 28 remnants of oceanic plates subducted into lower mantle and link these to mountain building zones from which they likely originated. Assuming remnants sank vertically through mantle, we reconstruct longitude at which they were subducted. No oceanic plate remnants from Carboniferous (~300-360 Ma))

Van der Meer, D.G., T.H. Torsvik, W. Spakman, D.J.J. van Hinsbergen & M.L. Amaru (2012)- Intra-Panthalassa Ocean subduction zones revealed by fossil arcs and mantle structure. Nature Geoscience 5, p. 215-219.
(Vast Panthalassa Ocean once surrounded supercontinent Pangaea, but subduction since then consumed most of ocean floor. Extinct intra-oceanic volcanic arcs accreted to N American and Asian continental margins. To constrain paleoposition of extinct arcs, they were correlated with remnants of subducted slabs identified in mantle from-wave tomographic models)

Van der Meer, D.G., D.J.J. van Hinsbergen & W. Spakman (2018)- Atlas of the underworld: slab remnants in the mantle, their sinking history, and a new outlook on lower mantle viscosity. Tectonophysics 723, p. 309-448.
(online at: www.sciencedirect.com/science/article/pii/S0040195117304055)
(Global inventory of 94 subducted slabs in mantle, as identified from tomography. Including slabs from SE Asia: Arafura, Banda, Burma (formerly part of Sunda slab), Halmahera (15-0 Ma), Kalimantan (active from ~70- 20 Ma: interpreted by some as deeper part of Sunda slab), Papua (base age 90-45 Ma, top age 26-20 Ma), Sangihe (base age 30-25 Ma; at shallow upper mantle levels separated into several slabs: Philippine Trench slab, Molucca Sea West slab, Sulu and Celebes Sea South slab) and Sunda slab (active since 50-45 Ma). (see also associated website: www.atlas-of-the-underworld.org/)

Van Leeuwen, T.M. (2014)- The enigmatic Sundaland diamonds- a review. In: I. Basuki & A.Z. Dahlius (eds.) Sundaland Resources, Proc. Annual Conv. Indonesian Soc. Economic Geologists (MGEI), Palembang, p. 181-204.
(online at: www.academia.edu/18356584/The_enigmatic_Sundaland_diamonds)

(Review of alluvial diamond occurrences with no obvious primary sources in Myanmar, Thailand and Sumatra ('Sibumasu diamonds'; spatially associated with Carboniferous-Permian glacial pebbly mudstones, stretching from Myanmar to Sumatra) and in 4 districts in Kalimantan ('Kalimantan diamonds'). Together they are referred herein as 'Sundaland diamonds'. Three possible scenarios for formation of Kalimantan diamonds: A. formed in sub-continental lithospheric mantle and transported to surface by kimberlite or lamproite, B. formed in descending slab during failed subduction at low T and depth under ultrahigh pressure conditions and sampled by non-kimberlitic magmas, C. derived from obducted ophiolite)

Van Waterschoot Van der Gracht, W.A.J.M. (1928)- The problem of continental drift. Proc. Symposium Theory of continental drift; a symposium on the origin and movement of land masses, both inter-continental and intra-continental, as proposed by Alfred Wegener, New York 1926, American Assoc. Petroleum Geol. (AAPG), p. 1-75.
(Overview of merits of the then still controversial theory of continental drift. On p. 57 vWvdG points out that most of the early Dutch geologists working in 'East Indies' (Molengraaff, Brouwer, Wing Easton) were supportive of Wegener's hypothesis, because New Guinea obviously rapidly drifted to N, and that very rapid active uplift and subsidence can be observed in E Indonesia (later Dutch regional geologists like Van Bemmelen, Kuenen and Umbgrove (wrongly) argued that continental drift was physically impossible; JTvG))

Van Welzen, P.C., J.A.N Parnell & J.W.F. Slik (2011)- Wallace's Line and plant distributions: two or three phytogeographical areas and where to group Java? Biological J. Linnean Society, London, 103, p. 531-545.
(online at: www.naturalscience.tcd.ie/assets/pdf/Wallace's%20line.pdf)
(No sharp E-W boundary in modern plant distributions in SE Asia. Three areas on basis of floristic affinities/ similarities (1) islands of Sunda Shelf, W Java (everwet Sundaland floristic group); (2) Wallacea, consisting of central islands and E Java, with two sub-areas: Java, the Philippines and Lesser Sunda Islands with more Oriental flora and Sulawesi and Moluccas with more Australian flora; (3) New Guinea/Sahul Shelf)

Van Welzen, P.C., J.W.F. Slik & J. Alahuhta (2005)- Plant distribution patterns and plate tectonics in Malesia. Biologische Skrifter Danske Vidensk. Selskab 55, p. 199-217.
(online at: http://phylodiversity.net/fslik/index_files/BiolSkr2005.pdf)
(Philippines, Borneo, and especially New Guinea comprise significantly more than average endemic plants. Three major distribution patterns in 'Malesia' (SE Asia): Indian-Malesian, Circum-Pacific and Wallacea, the transition zone between Sunda and Sahul floras)

Veevers, J.J. (ed.) (2000)- Billion-year earth history of Australia and neighbours in Gondwanaland. GEMOC Press, Sydney, p. 1-388.

Veevers, J.J. (2004)- Gondwanaland from 650-500 Ma assembly through 320 Ma merger in Pangea to 185-100 Ma breakup: supercontinental tectonics via stratigraphy and radiometric dating. Earth-Science Reviews 68, p. 1-132.

Veevers, J.J. (2013)- Pangea: geochronological correlation of successive environmental and strati-tectonic phases in Europe and Australia. Earth-Science Reviews 127, p. 48-95.
(Supercontinent Pangea formed from Ouachita-Variscan oblique collision of Laurussia and Gondwanaland in Late Carboniferous (~320-300 Ma) (in European region). Shortening in C Australia, megakinking in Lachlan orogen and bending of oroclines in E. Australia possibly tied to this event (but 10,000 km away!). Followed by Extensions I (~300 Ma, Carboniferous-Permian boundary; E Australia cut into long magmatic rift) and II (235 Ma, Carnian), expressed as rifts and sags that accumulated second set of coal-bearing strata)

Veevers, J.J. & C.M. Powell (eds.) (1994)- Permian-Triassic Pangean basins and foldbelts along the Panthalassan margin of Gondwanaland. Geological Society of America (GSA) Memoir 184, p. 1-368.

Veevers, J.J. & R.C. Tewari (1995)- Permian-Carboniferous and Permian-Triassic magmatism in the rift zone bordering the Tethyan margin of southern Pangea. Geology (GSA) 23, p. 467-470.

(Magma emplaced in India-Australia rift zone along Tethyan margin in Permian-Carboniferous and Permian-Triassic times)

Veevers, J.J. & R.C. Tewari (1995)- Gondwana master basin of Peninsular India between Tethys and the interior of the Gondwanaland Province of Pangea Geological Society of America (GSA) Memoir 187, p. 1-73.
*(Deposition in Gondwana master basin of Peninsular India in latest Carboniferous- E Jurassic on Archean-Proterozoic basement. Gondwana deposition ceased with breakup of Greater India from rest of Gondwanaland in Late Jurassic- E Cretaceous, followed by rift-drift succession along its margins. Master basin 1000km inboard of passive margin of Tethyan Gon*Philippon, J.P. Avouac & M. *dwanaland; filled initially with lobes of glaciogenic sediment)*

Verolino, A., S.F. Wee, S.F. Jenkins, F. Costa & A. D. Switzer (2024)- SEATANI: hazards from seamounts in Southeast Asia, Taiwan, and Andaman and Nicobar Islands (eastern India). Natural Hazards Earth System Sciences 24, p. 1203-1222.
(online at: https://nhess.copernicus.org/articles/24/1203/2024/nhess-24-1203-2024.pdf)
(Compilation of 466 seamounts (topographic features >100m above surrounding seafloor) and potential hazards in deep waters of 'SEATANI' (SE Asia, Taiwan, and Andaman-Nicobar Islands). All assumed to be of volcanic origin. Majority Type Stage 2 (65%; >1000m above seafloor and >700m below sea level). Highest concentrations of Stage-1 and Stage-2 seamounts in extensional and back-arc basins (e.g. S China Sea, Banda Sea) and in zones undergoing subduction (off Sumatra, Java, Philippines)

Von Hagke, C. & M. Gurnis (2016)- Origin and time evolution of subduction polarity reversal from plate kinematics of Southeast Asia. Geology (GSA) 44, 8, p. 659-662.
(online at: http://web.gps.caltech.edu/~avouac/publications/vonHagke-Geology-2016.pdf)
(Regional model of plate geometry and kinematics of SE Asia since Late Cretaceous and origin of subduction polarity reversal currently observed in Taiwan)

Von Koenigswald, G.H.R. (1936)- De glasmeteorieten van Nederlandsch-Indie. Summary of lecture for KNV (Koninklijke Natuurkundige Vereeninging), held at TH Bandung, 11 October 1936. Natuurkundig Tijdschrift voor Nederlandsch-Indie 96, p. 283-286.
('The glass meteorites of the Netherlands Indies'. Discussion of Middle Pleistocene tektites, in Indonesia known from three areas (1) Billiton, Natuna islands, Malacca, (2) Borneo (Riam River, Martapura, British North Borneo) and Java (Jepara, Trinil Beds, Sangiran) and all tied to single meteorite impact event in mainland SE Asia)

Von Koenigswald, G.H.R. (1960)- Tektite studies I: The age of the Indo-Australian tektites. Proc. Koninklijke Nederlandse Akademie van Wetenschappen, Amsterdam, B 63, p. 135-141.
(On the distribution of glassy tektites, widespread in M Pleistocene of SE Asia and Australia, and derived from meteorite impact somewhere in Indochina. (Age ~0.8 Ma; JTvG). In Sangiran, C Java, tektites reported from Upper Kabuh Fm)

Von Koenigswald, G.H.R. (1960)- Tektite studies II: The distribution of the Indo-Australian tektites. Proc. Koninklijke Nederlandse Akademie van Wetenschappen, Amsterdam, B 63, p. 142-153.
(Stauffer 1983: First paper to point out distribution of Australasian tektites in terms of size and shape from NW (Indochina) to SE (Australia), an observation crucial to later understanding of origin of these bodies)

Von Koenigswald, G.H.R. (1964)- The problem of tektites. Space Science Rev. 3, 3, p. 433-445.
(Early significant review of tektites, including Pleistocene Australasian strewn field and their extra-terrestrial impact origin)

Von Koenigswald, G.H.R. (1968)- Tektite studies X: The relationship of shape, size and texture in Asiatic tektites. Proc. Koninklijke Nederlandse Akademie van Wetenschappen, Amsterdam, B 71, 2, p. 1-9.

Wallace, A.R. (1860)- On the zoological geography of the Malay Archipelago. Zoological J. of the Linnean Society 4, 16, p. 172-184. *(transcription of paper online at: https://digitalcommons.wku.edu/cgi/viewcontent.cgi?article=1003&context=dlps_fac_arw)*
(with description of what became known as the 'Wallace Line', the line across the Malay Archipelago (= the Indonesian Archipelago) separating Indo-Malayan (Asian) faunas in the West and Austro-Malayan faunas in the East. Communicated to the Linnean Society in London by Charles Darwin, 3 November 1859, while Wallace was still in the Far East (N.B.:Earlier reports of this well-known faunal and floral divide had actually already been published earlier, by German and Swiss naturalists Salomon Muller (1839, 1842, 1850) and Heinrich Zollinger (1857). Wallace was merely the first to write about it it in the English-language literature; JTvG)

Wallace, A.R., (1863)- On the physical geography of the Malay Archipelago. The Journal of the Royal Geographical Society of London 33, p. 217-234.
(online at: https://www.jstor.org/stable/1798448)
(Early brief, English-language description of physical geography of the Inonesian Archipelago. With one map)

Wallace, A.R. (1869)- The Malay Archipelago: The land of the orang-utan and the bird of paradise. A narrative of travel with studies of Man and Nature. MacMillan & Co, U.K., p. 1-525.
(With several reprint editions. Classic work of present-day natural history/ faunal provinces of Indonesia by English naturalist Wallace (not much on geology))

Wang, J.H., A. Yin, T.M. Harrison, M. Grove, Y.Q. Zhang & G.H. Xie (2001)- A tectonic model for Cenozoic igneous activities in the eastern Indo-Asian collision zone. Earth Planetary Science Letters 188, p. 123-133.
(online at: http://sims.ess.ucla.edu/pdf/wang_et_al_2001.pdf)
(Cenozoic activities in the eastern Indo-Asian collision zone of SE China and Indochina in two episodes, each with distinctive geochemical signatures, at 42-24 Ma and 16-0 Ma)

Wang; L., E. Garzanti, F. Cai, J. Zhang; L. Shen; P. Nulay, N. Siritongkham, L. Ding & C. Wang (2023)- The underestimated role of tectonics in the mid-Late Cretaceous desertification in SE Asia. Geological Society of America (GSA) Bull. 136, 1-2, p.: 418-432.
(Mid-Late Cretaceous desertification of mainland SE Asia (Simao Basin, Khorat Plateau, etc.) here tied to elevated topography caused by closure of Bangong-Nujiang suture (Mesotethys), affecting atmospheric circulation and drainage development across SE Asia)

Wang, M., X.W. Zeng, C.M. Xie, A. Danzeng, C. Lia, J.J. Fan & H. Li (2019)- Dating of detrital zircon grains and fossils from Late Palaeozoic sediments of the Baruo area, Tibet: constraints on the Late Palaeozoic evolution of the Lhasa terrane. International Geology Review 62, 4, p. 1-14.
(online at: www. researchgate.net/publication/333204695_Dating_of_detrital_zircon_grains_and_fossils_from_Late_Palaeozoic_sediments_of_the_Baruo_area_Tibet_constraints_on_the_Late_Palaeozoic_evolution_of_the_Lhasa_terrane)
(U–Pb dating of detrital zircons from Late Carboniferous- E Permian lower-greenschist-facies clastics of Lagar Fm in Baruo area, Tibet (northern Lhasa Terrane). Deposited in shallow-marine environment at N margin of Gondwana. Glacial marine diamictites common in basal part. Overlying Angjie Fm limestones with E-M Permian fusulinids and solitary corals. Zircon ages in Lagar Fm 90% Precambrian ages. Characteristic age peaks at ~520, ~1140, 2390 and 2650 Ma. Youngest grain 322 Ma)

Wang, P. (2004)- Cenozoic deformation and the history of sea-land interactions in Asia. In: P. Clift et al. (eds.) Continent-ocean interactions within East Asian marginal seas, American Geophysical Union (AGU), Geophysical Monograph Series 149, p. 1-22.
(After India-Asia collision in Eocene, Asia significantly enlarged its size and increased its altitude. W-tilting topography of E Asia reversed with uplift of Tibetan Plateau and opening of marginal seas, resulting in Asian fluvial system radiating from uplifted center of continent. Cenozoic deformation of Asia also responsible for initiation of Asian monsoon system in E Miocene and further strengthening at ~8 Ma and ~3 Ma)

Wang, Q., J. Deng, C. Li, G. Li, L. Yu & L. Qiao (2016)- The boundary between the Simao and Yangtze blocks and their locations in Gondwana and Rodinia: Constraints from detrital and inherited zircons. Gondwana Research 26, p. 438-448.
(Simao (N Indochina) and Yangtze (S China) continental blocks amalgamated in Late Paleozoic- Triassic by closure of Paleotethys branch (Ailaoshan ocean). Detrital and inherited zircons suggest Laowangzhai-Mojiang suspect terrane belongs to Simao-Indochina block, so Paleotethys suture along Ailaoshan late-Devonian- E Carboniferous ophiolite belt. Precambrian detrital zircon ages suggest Yangtze block not part of Australia or India in Rodinia, while Simao-Indochina block derived from Indian Gondwana)

Wang, W., Q.M. Qu & M. Zhu (2010)- A brief review of the Middle Palaeozoic vertebrates from Southeast Asia. Palaeoworld 19, p. 27-36.
(On Silurian-Devonian fish remains from Shan-Thai (=Sibumasu), Indochina and S China blocks and their biogeographic affinities. Vertebrate fossils suggest proximity between S China and Indochina terranes in M Paleozoic and close relationship between Shan-Thai and E Gondwana (Australia) in M Devonian)

Wang, X., K. Makato & W. Hongzhen (1996)- On the tectonic position of the Baoshan region during the Late Palaeozoic. J. Southeast Asian Earth Sciences 13, p. 171-183.
(Devonian- Permian fauna of Baoshan block in Yunnan, SW China, very similar to S Tibet, but not Yangtze region. Faunal and paleomagnetic data for Late Paleozoic show Yangtze region very close to Equator, but Baoshan and S Tibet in middle latitudes (~32-43°S; probably in Gondwana domain))

Wang, X., I. Metcalfe, P. Jian, L. He & C. Wang (2000)- The Jinshajiang- Ailaoshan suture zone: tectono-stratigraphy, age and evolution. J. Asian Earth Sciences 18, p. 675-690.
(On M Triassic age for Jinshajiang- Ailaoshan suture, formed by collision of Changdu-Simao Block with S China Block. Jinshajiang oceanic lithosphere formed (as oceanic marginal basin of S China Block) in latest Devonian- earliest Carboniferous)

Wang, X., I. Metcalfe, P. Jian, L. He & C. Wang (2000)- The Jinshajiang suture zone: tectono-stratigraphic subdivision and revision of age. Science in China, ser. D, 43, 1, p. 10-22.
(Jinshajiang suture zone in W Yunnan- W Sichuan is remnant of backarc basin in E part of Paleo-Tethys. Basin started in Late Devonian, closed in E-M Triassic)

Wang, X.D., K. Hu, Y.K. Shi, J.T. Chen, S.R. Yang, X.Y. Ye, X.M. Li, Y.F.Song, B. Chen, X.L. Chang et al. (2021)- The missing upper Carboniferous in the Cimmerian continent: A critical review. Earth-Science Reviews 217, 12, 103627, p. 1-30.
(online at: www.sciencedirect.com/journal/earth-science-reviews/vol/217/suppl/C)
(Cimmerian continent series of blocks rifted from Gondwana in E Permian, then drifted towards tropical areas and collided with S Eurasia in Triassic. Cimmerian blocks include Shan-Thai (=Sibumasu), Tengchong, Baoshan, Lhasa, S Qiangtang, S Afghanistan (Pamir) and S Iran. U Carboniferous sediments absent (different from S China and other Tethyan regions). Lower Carboniferous sediments in Cimmerian blocks Tournaisian-Visean ages, with chert nodules and faunas of Eurasian affinity. Lower Permian glacial-marine siliciclastics with cool/cold-water bivalves, small solitary non-dissepimented corals, low diversity fusulinds Pseudofusulina and Eoparafusulina (Peri-Gondwanan fauna). Basaltic magmatism in Cimmerian blocks mainly in Artinskian, likely related to initial rifting from N Gondwana margin. Late E Permian- M Permian siliciclastics and carbonates with mixed cold-warm-water fauna indicate N-ward drifting of Cimmerian blocks. Typical Cimmerian taxa: rugose coral Thomasiphyllum, fusulinids Monodiexodina and Eopolydiexodina, and also some tropical Tethyan elements. U Permian mainly dolomitic limestones with Cimmerian foraminifera Shanita and Hemigordius and Tethyan taxa like compound coral Waagenophyllum)

Wang, X.D, W. Lin, S.Z. Shen, P. Chaodumrong, G.R. Shi, X. Wang & Q.L. Wang (2013)- Early Permian rugose coral *Cyathaxonia* faunas from the Sibumasu Terrane (Southeast Asia) and the southern Sydney Basin (Southeast Australia): paleontology and paleobiogeography. Gondwana Research 24, 1, p. 185-191.
(Sibumasu Terrane rifted from Gondwana in E Permian. Small solitary rugose Cyathaxonia coral faunas in Lower Permian of Sibumasu in SE Asia and Sydney Basin, SE Australia, suggesting cool shallow marine

conditions, while Cathaysian corals reflect location near Paleo-equator. M Permian corals in Sibumasu dominated by solitary and compound Waagenophyllidae ('Cathaysian'), but some endemic taxa in Sibumasu Terrane during this time suggest it was still independent paleobiogeographical entity. Eleven coral species including 5 new taxa described. No Late Carboniferous corals known from Gondwanan terranes in SE Asia)

Wang, X.D., G.R. Shi, T. Sugiyama & R.R. West (2003)- Late Palaeozoic corals of Tibet (Xizang) and West Yunnan, Southwest China: successions and palaeobiogeography. Palaeogeogr. Palaeoclim. Palaeoecology 191, 3, p. 385-397.
(On coral faunal provincialism on Carboniferous- Permian of Tibet- W Yunnan and Cimmerian terranes. Sakmarian-Artinskian Cyathaxonia fauna. In late E Permian development of Himalayan (N margin of Gondwana) and Cimmerian provinces (Lhasa- Qiantang, Tengchong, Baoshan, W Yunnan), with Roadian solitary corals, Wordian-Capitanian Waagenophyllidae and endemic Cimmerian taxa such as Thomasiphyllum and Wentzellophyllum persicum. Thomasiphyllum has distinctive paleogeographical distribution in M Permian of Cimmerian continents, also in W Sumatra, etc. Late Permian Himalayan fauna with small solitary corals only (Lytvolasma fauna) and Cathaysian with Ipciphyllum, Liangshanophyllum, etc.)

Wang, X.D. & T. Sugiyama (2002)- Permian coral faunas of the eastern Cimmerian continent and their biogeographical implications. J. Asian Earth Sciences 20, p. 589-597.
(online at: https://repository.geologyscience.ru/bitstream/handle/123456789/28078/Wang_02.pdf)
(Early Permian corals of E Cimmerian continent (= Sibumasu) of Peri-Gondwanan affinity with small solitary forms; different from Cathaysian area, where abundant large solitary and compound corals occur. In M Permian endemic Cimmerian- Cathaysian fauna of large solitary and massive Waagenophyllidae, with Cathaysian aspect. Late Permian corals all Cathaysian. Changes related to rifting of Cimmerian continent from Gondwanaland in late Early Permian and subsequent N-ward drift)

Wang, X.D., T. Sugiyama, K. Ueno &Y. Mizuno (1999)- Peri-Gondwanan sequences of Carboniferous and Permian age in the Baoshan Block, West Yunnan, Southwest China. In: B. Ratanasthien & S.L. Rieb (eds.) Proc. Int. Symposium Shallow Tethys (ST) 5, Chiang Mai 1999, Dept. of Geological Science, Chiang Mai University, p. 88-100 *(ST5 book online at: https://library.dmr.go.th/elib/cgi-bin/opacexe.exe?op=mmvw&db=Main&skin=S&mmid=19206&bid=17374)*
(Baoshan Block in SW China includes Gondwanan Lower Permian diamictites overlain by with Cyathaxonia corals and low diversity fusulinids with Pseufusulina and Eoparafusulina species. Overlying E Permian Woniusi Fm basalts, followed by Shazipo Fm carbonates with Eopolydiexodina and Shanita- Hemigordius (close to Sibumasu block of SE Asia))

Wang, X.D., Y.Q. Zhang & Wei Lin (2010)- Carboniferous-Permian rugose coral *Cyathaxonia* faunas in China. Science China, Earth Sciences, 53, 12, p. 1864-1872
(Cyathaxonia faunas of small solitary corals widely distributed in Carboniferous- Permian beds across China. 12 families and 40 genera recognized. Cyathaxonia faunas of Baoshan, W Yunnan and S Anhui, occur just below large dissepimented solitary and compound corals in continuous sequence, implying occurrence not strictly related to Gondwanan or peri-Gondwanan cold water environment, but may reflect by deeper water, mud-rich, quieter sedimentary environments)

Wang, Y., X. Qian, P.A. Cawood, H. Liu, Q. Feng, G. Zhao, Y. Zhang, H. He & P. Zhang (2018)- Closure of the East Paleotethyan Ocean and amalgamation of the Eastern Cimmerian and Southeast Asia continental fragments. Earth-Science Reviews 186, p. 195-230.
(Paleotethys suture zones (Changning-Menglian, Inthanon, Bentong-Raub) all relicts of E Paleotethys Ocean. E-ward subduction of ocean resulted in series of magmatic arc/ backarc basin/ continental fragments in SE Asia (from W to E: Lincang-Sukhothai-E Malaya arc, Jinghong-Nan-Sa Kaeo back-arc basin, Simao/ W Indochina fragment, Luang Prabang-Loei back-arc basin, S Indochina fragment, Wusu and Truong Son back-arc basins, N Indochina fragment, Jinshajiang-Ailaoshan-Song Ma branch/back-arc basin and S China Block. Assembly of fragments resulted in Triassic (Indosinian) metamorphism and related tectonothermal event. Switch from subduction of main E Paleotethys to collision of Sibumasu with Simao/Indochina at ~237 Ma. Timing of

collision events along Jinshajiang-Ailaoshan-Song Ma suture generally ~10 Ma older than along Changning-Menglian, Inthanon and Bentong-Raub suture zones)

Wang, Y., X. Qian, Y. Zhang, C. Gan, A. Zhang, F. Zhang, Q. Feng, P.A. Cawood & P. Zhang (2021)- Southern extension of the Paleotethyan zone in SE Asia: evidence from the Permo-Triassic granitoids in Malaysia and West Indonesia. Lithos 398-399, 3-4, 106336, p. 1-19.
(Consumption of E Paleotethyan Ocean final step in creating SE Asia continent. New geochronological, etc., data for granitoids from W Kalimantan, W Java, Bangka-Belitung and Peninsular Malaysia suggest subdivision into (1) Eastern granites (W Kalimantan/~256-207 Ma, W Java/208-207 Ma, E Peninsular Malaysia/~289-217 Ma; from juvenile crust and Indochina basement) and (2) Main Range granites (Bangka-Belitung and W Peninsular Malaysia, ages ~226-198 Ma; from meta-greywacke source). Bentong-Raub Paleotethys suture extends S into easternmost Bangka-Belitung and W Java (?). Eastern granites reflect E-ward subduction of Paleotethys. Main Range granites post-collisional rocks)

Wang, Z., D. Zhao, X. Chen & R. Gao (2022)- Subducting slabs, Hainan plume and intraplate volcanism in SE Asia: insight from P-wave mantle tomography. Tectonophysics 831, 229329, p. 1-17.
(P wave tomography model down to 1600 km under SE Asia, with subducted plates revealed as high-velocity bodies. Intraplate volcanoes in Borneo underlain by low-velocity anomalies in upper mantle, with high-velocity anomaly in lower mantle. Hot and wet upwelling flows in mantle wedge above stagnant slab in mantle transition zone may have caused intraplate volcanism in Borneo. Large low-velocity anomaly under mainland SE Asia basalt province, possibly hot zone with mantle (e.g. Hainan plume).

Wanless, H.R. & J.R. Cannon (1966)- Late Paleozoic glaciation. Earth-Science Reviews 1, 4, p. 247-286.
(Late Paleozoic glaciation reported from many localities on Gondwana, including India, Pakistan, Australia, etc. Nothing known from SE Asia yet)

Waterhouse, J.B. (1972)- The evolution, correlation, and paleogeographic significance of the Permian ammonoid family Cyclolobidae. Lethaia 5, 3, p. 251-270.
(Cyclolobidae of M Permian age. Waagenoceras- Timorites lineage inhabited paleotropical latitudes, and Timorites found around rim of Pacific Ocean (both also present on Timor; JTvG))

Waterhouse, J.B. (1982)- An Early Permian cool-water fauna from pebbly mudstones in south Thailand. Geological Magazine 119, 4, p. 337-354.
(E Permian (Asselian) small brachiopod fauna from E Permian pebbly mudstones- sandstones of Phuket Gp at Ko Muk and Ko Phi Phi islands, Andaman Sea. With Komukia, Cancrinelloides, Rhynchopora, Sulciplica, etc. At one locality associated with solitary coral Euryphyllum. Most genera found in temperate- high paleolatitudes, suggesting pebbly mudstones are cool water deposits, contemporaneous with Late Asselian Gondwana glacial deposits (=Phuket Gp is part of 'Sibumasu terrane'; JTvG))

Waterhouse, J.B. (1987)- Perceptions of the Permian Pacific- the Medusa hypothesis. In: E. Brennan (ed.) Proc. Pacific Rim Congress 1987, Gold Coast, Australasian Institute of Mining and Metallurgy, Parkville, p. 607-614.

Waters, J.A. (1990)- The palaeobiogeography of the Blastoidea (Echinodermata). In: W.S. McKerrrow & C.R. Scotese (eds.) Palaeozoic palaeogeography and biogeography, Geological Society, London, Memoir 12, p. 339-352.
(Permian blastoids widespread but most diverse in SE Asia and Australia. Timor faunas Sakmarian-Asselian and Kazanian, and most diverse and abundant. Paleoecology and stratigraphy poorly understood. Some common species between Timor and Australia, but others conspicuously absent: Angioblastus, Deltoblastus not in Australia; Australoblastus not in Timor. Reasons for local endemism unclear. Kazanian Timor fauna is last successful blastoid community before going extinct)

Webby, B.D., I.G. Percival, G. Edgecombe, F. Vandenberg, R. Cooper, J. Pickett et al. (2000)- Ordovician biogeography of Australasia. In: J. Wright et al. (eds.) Palaeobiogeography of Australasian faunas and floras, Assoc. Australian Palaeont., Memoir 23, p. 63-126.

Webster, G.D. (1998)- Palaeobiogeography of Tethys Permian crinoids. In: G.R. Shi, N.W. Archbold & M. Grover (eds.) Strzelecki Int. Symposium on Permian of Eastern Tethys: biostratigraphy, palaeogeography and resources, Proc. Royal Society of Victoria 110, 1-2, p. 289-308.
(No Permian crinoid fauna in world as diverse and abundant as Timor. Five horizons between Sakmarian-Wuchiapingian. Australian faunas generally considered as cooler water faunas, >35°S. Timor warm-water shelf. In Artinskian greater similarity beween W Australia and Timor than between W and E Australia)

Wei, W., D. Zhao, W. Yu & Y. Shi (2022)- Complex patterns of mantle flow in eastern SE Asian subduction zones inferred from P-wave anisotropic tomography. J. of Geophysical Research 127, 5, e2021JB023366, p.
(New P-wave velocity models beneath eastern SE Asia reveal detailed structures of subducting S China Sea (SCS), Negros, Molucca Sea, Philippine Sea, and Banda slabs, the previously subducted Proto-SCS slab and remnants of other paleo slabs, showing long-lived subductions. Low dip angle of SCS slab S of 18°N caused by subduction of extinct mid-ocean ridge, and a slab tear possibly formed at 18°N. Etc.)

Westermann, G.E.G. (1980)- Ammonite biochronology and biogeography of the circum-Pacific Middle Jurassic. In: M.R. House & J.R. Senior (eds.) The Ammonoidea, Academic Press, London, p. 459-498.

Westermann, G.E.G. (1988)- Middle Jurassic ammonite biogeography supports ambi-Tethyan origin of Tibet. In: M.G. Audley-Charles & A. Hallam (eds.) Gondwana and Tethys, Geological Society, London, Special Publ. 37, p. 235-239.
(M Jurassic ammonites from Tibet Tethyan Himalaya (Spiti Shale) typical of SE margin of Tethys, with connections to W India, E Africa, NW Australasia. N Tibet (Qamdo) and S Tibet (Lhasa) consistent with Eurasian position in M Jurassic. Tithonian ammonoid affinities of Tethyan Himalaya very close to NW Australia, which Uhlig (1911) correctly included in Himalayan province)

Westermann, G.E.G. (ed.) (1993)- The Jurassic of the Circum-Pacific. Cambridge University Press, p. 1-688.
(Collection of 27 papers on Jurassic geology, floras, faunas and biogeography of circum-Pacific region, incl. Sukamto & Westermann on Indonesia/ PNG and Sato on SE Asia and Japan)

Westermann, G.E.G. (1993)- Global bio-events in mid-Jurassic ammonites controlled by seaways. In: M.R. House (ed.) The Ammonoidea: environment, ecology and evolutionary change. Systematics Association Special Volume 47, Oxford Science Publ., p. 187-226.

Westermann, G.E.G. (2000)- Marine faunal realms of the Mesozoic: review and revision under the new guidelines for biogeographic classification and nomenclature. Palaeogeogr. Palaeoclim. Palaeoecology 163, p. 49-68.
(Review of published Mesozoic marine realms subrealms and superrealms and problems in defining them. Most important superrealms: (1) Boreal/Euroboreal (Arctic and Boreal-Atlantic) and (2) Tethys-Panthalassa (Tethyan, Mediterran-Caucasian, Indo-Pacific (Jurassic-E Cretaceous) and Austral (M-Late Cretaceous))

Whitmore, T.C. (ed.) (1981)- Wallace's Line and place tectonics. Clarendon Press, Oxford, p. 1-90.
(Collection of papers on relation between present-day faunal provinces and plate tectonic history of Indonesia, incl. Audley-Charles paper on plate tectonics)

Whitmore, T.C. (ed.) (1987)- Biogeographical evolution of the Malay Archipelago. Oxford Monographs Biogeography 4, Clarendon Press, Oxford, p. 1-145.

Whymark, A. (2021)- A review of evidence for a Gulf of Tonkin locationfor the Australasian tektite source crater. Thai Geoscience J. 2, 2, p. 1-29.
(online at: https://www.academia.edu/50761325/A_review_of_evidence_for_a_Gulf_of_Tonkin_location_for_the_Australasian_tektite_source_crater)

Whymark, A. (2021)- Constraints on the location of the Australasian tektite impact crater. Unpublished Draft Report. p. 1-64. *(online at: www.academia.edu/45122493/Constraints_on_the_Location_of_the_Australasian_Tektite_Impact_Crater)*
(Extenzive review of large Pleistocene cosmic impact event in Indochina Peninsula around ~0.788 Ma, and its 1448 known Australasian tektites (AAT) localities across SE Asia, Australia and beyond. AAT strewn field with proximal (e.g.indochinite, chinite), medial (e.g. philippinite, billitonite) and distal (e.g. javaite, australite) tektites. This, with likely pattern of 'ejecta rays' radiating from S Laos/ C Vietnam to NW Gulf of Tonkin area, point to impact location in this area, but impact crater not yet firmly identified. Crater diameter likely ~40 km and obliquity of Australasian impact was perhaps 15°- 25°. Sangiran, Java, tektites transitional between ablated and unablated forms. Etc.)

Wilson, K.M., M.J. Rosol & W.W. Hay (1989)- Global Mesozoic reconstructions using revised continental data and terrane histories: a progress report. In: J.W. Hillhouse (ed.) Deep structure and past kinematics of accreted terranes, American Geophysical Union (AGU) Geophysical Monograph Series 50, p. 1-39.
(online at: www.agu.org/books/gm/v050/GM050p0001/GM050p0001.pdf)
(Series of interesting M Triassic- E Cretaceous global plate reconstructions, largely driven by faunal records)

Wnuk, C. (1996)- The development of floristic provinciality during the Middle and Late Paleozoic. Review Palaeobotany Palynology 90, p. 5-40.
(On evolution of floristic provinces since Silurian. Three main phytogeographic units in earliest fossil floras (Angara, Euramerica, Gondwana). Fourth unit (Cathaysia) differentiated from Euramerica in latest Carboniferous. Includes mention of New Guinea Gondwanan flora. Nothing on Sumatra or other SE Asia)

Wood, G.D., M.A. Miller, D.T. Pocknall, A.M. Aleman, J.A. Stein & R. Dino (1998)- Paleoclimatologic, paleoecologic and biostratigraphic significance of the Middle Cretaceous elaterate microfloral province, Gondwana. In: AAPG International Conference Exhib., Abstracts, American Assoc. Petroleum Geol. (AAPG) Bull. 82, 10, p. 1982. *(Abstract only)*
(One of best defined Cretaceous phytogeographic realms is Albian-Cenomanian 'elaterate' microfloral province, bracketing Cretaceous paleo-equator, in tropical-subtropical Africa- S America and outliers in China, Middle East and PNG. Typified by elater bearing pollen Elaterocolpites, Elateroplicites, Elateropollenites, etc. Parent plants inhabited paleotropical humid coastal plains of Proto-South Atlantic and Tethys oceans)

Wopfner, H. (1996)- Gondwana origin of the Baoshan and Tengchong terranes of west Yunnan. In: R. Hall et al. (eds.) Tectonic evolution of Southeast Asia, Geological Society, London, Special Publ. 106, p. 539-547.
(Permo-Carboniferous glaciomarine deposits, Permian cold-water faunas and Glossopteris indicate a Gondwana provenance of Baoshan and Tengchong Blocks in W Yunnan, SW China. Late Permian- E Triassic post-glacial phase much warmer climate. Glacigene successions of Baoshan Block rel. thin and overlain by thick basalts and red beds (volcanic rift setting). On Tengchong Block glacigene marine deposits >1000 m, followed by thick E Permian reefal limestones (proximal passive margin at somewhat lower latitude). Both terranes separated from Gondwana in late Early Permian, and part of Sibumasu tectonostratigraphic terrane)

Wopfner, H. (1999)- The Early Permian deglaciation event between East Africa and Northwestern Australia. J. African Earth Sciences 29, p. 77-90.
(Late Paleozoic glacigene deposits form base of Gondwana megasequence along entire length of Tethyan margin of Gondwana. Examples of deglaciation sequences, including Tanzania, S Oman, Lesser Himalaya, NW Australia and SW China. All deglaciation sequences Late Asselian- E Sakmarian age. High content of organic matter in deglaciation deposits, like Late Asselian-E Sakmarian Treachery Shale of Australian NW Shelf with microflora of Pseudoreticulatispora (= Granulatisporites) confluens. Peak sea level in Late Sakmarian- E Artinskians. Swift and synchronuous climatic amelioration reflect rapid and substantial global warming)

Wopfner, H. (2001)- Gondwana terranes of southwest China and their connections to India and Australia. J. Indian Association Sedimentologists, Delhi, 20, p. 1-19.
(Two groups of terranes with Late Carboniferous-E Permian glacial deposts that separated from Gondwana in Permian: (1) LBS (Lhasa Block, Tibet and Baoshan, W Yunnan) and Shan Thai (E Burma)), which evolved in

volcanic rift setting with margin of Greater India and NW Australia, and separated from Gondwana in Artinskian; (2) TMS (Tengchong Block, peninsular Thailand, W Malay Peninsula and N Sumatra), developed on peri-continental non-volcanic rift along N margin of Australia and pre-Permian New Guinea and separated slightly earlier than LBS)

Wopfner, H. & X.C. Jin (2009)- Pangea megasequences of Tethyan Gondwana-margin reflect global changes of climate and tectonism in Late Palaeozoic and Early Triassic times- a review. Palaeoworld 18, p. 169-192.
(Late Carboniferous- M Triassic 'Pangea stage' similar trends across Gondwana. Late Carboniferous- E Permian glacial- periglacial deposits followed by deglaciation in E Sakmarian, with typical facies with coal measures and redbeds. In E Permian, large graben structures started to develop between Africa and India and between India and Australia. Rifting along Tethyan margin started in E Permian, associated with volcanism between Kashmir and Yunnan and in NW Australia. Spreading of Neo-Tethys lead to separation of Cimmerian Blocks from Gondwana in late E Permian- Triassic. Two facies realms (1) intracratonic rift (Kashmir, Lhasa, Baoshan blocks) and (2) detached more distal blocks (Tengchong, Malaya, Sumatra))

Wright, A.J., G.C. Young, J.A. Talent & J.R. Laurie (eds.) (2000)- Palaeobiogeography of Australasian faunas and floras. Memoir Assoc. Australasian Palaeontologists (AAP) 23, p. 1-515.
(Collection of 10 papers describing Australasian floras-faunas and paleobiogeography from Cambrian-Quaternary (but not including Triassic; JTvG))

Wu, G.Y. & B.L. Cong (1995)- Tethyan evolution and SE Asian continental accretion. Proc. Int. Symposium Geology of Southeast Asia and adjacent areas, Hanoi 1995, Journal of Geology. Hanoi, B, 1995, 5-6, p. 293-301.

Wu, H.R., C.A. Boulter, B.J. Ke, D.A.V. Stow & Z.C. Wang (1995)- The Changning-Menglian suture zone; a segment of the major Cathaysian-Gondwana divide in Southeast Asia. Tectonophysics 242, p. 267-280.
(Changning-Menglian suture zone of W Yunnan, SW China, is major Cathaysia- Gondwana divide, representing closing of Paleo-Tethys Ocean. Narrow N-S zone of E Devonian- M Permian oceanic siliceous sediments and dismembered ophiolite complexes, including reef-capped oceanic islands. Simao terrane is E of suture, has Cathaysian affinities and not part of Sibumasu terrane as suggested by various authors. Subduction created active continental margin on W edge of Simao terrane throughout much of Triassic;until closure of this branch of Paleotethys in early Late Triassic)

Wu, J. & J. Suppe (2017)- Proto-South China Sea plate tectonics using subducted slab constraints from tomography. J. of Earth Science (China), 29, 6, p. 1304-1318.
(online at: https://link.springer.com/content/pdf/10.1007/s12583-017-0813-x.pdf)
(Reconstruction of vanished Proto-South China Sea ocean plate, from tomography imaging of subducted slab. Two slabs identified, now at depths of 750-900 km. Proto-South China Sea consumed by double-sided subduction: (1) 'North Proto-South China Sea' (now under northern S China Sea- Philippines) subducted southward in Oligo-Miocene under Dangerous Grounds, expanding S China Sea by in-place 'self subduction' similar to W Mediterranean basins; (2) limited Southward subduction of proto-S China Sea under Borneo before Oligocene (35 Ma), represented by 800-900 km deep 'S Proto-South China Sea' slab (now under southern South China Sea- North Borneo))

Wu, J., J. Suppe & R.V.S. Kanda (2012)- Constraints on the extrusion of SE Asia from subducted slabs of the Indian, Australian, Philippine Sea and Molucca Sea plates. EGU General Assembly, Vienna 2012, p. 10019
(Abstract only)
(Subducted slabs under SE Asia mapped from seismic tomography and seismicity. When unfolded and restored, slabs show incompatibilities with existing plate-tectonic models. Philippine Sea, Molucca Sea and Celebes Sea plates are fragments of once much larger NE Indian-Australian Ocean, once continuous with Sunda slab and present Indian Ocean)

Wu, J., J. Suppe, R. Lu & R. Kanda (2016)- Philippine Sea and East Asian plate tectonics since 52 Ma constrained by new subducted slab reconstruction methods. J. of Geophysical Research: Solid Earth 121, 6, p. 4670-4741.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/full/10.1002/2016JB012923)
(Reconstructed Philippine Sea and E Asian plate tectonics since E Eocene from 28 slabs mapped from global tomography, with subducted area of ~25% of present-day global oceanic lithosphere. Slab constraints include subducted parts of existing Pacific, Indian and Philippine Sea oceans, plus subducted proto-S China Sea and newly discovered 8000 × 2500 km 'East Asian Sea' between Pacific and Indian Oceans at 52 Ma based on lower mantle flat slabs. Philippine Sea formed above Manus plume near Pacific- E Asian Sea plate boundary. Philippine Sea W-ward motion and post-40 Ma max. 80° CW rotation accompanied late Eocene-Oligocene collision with Caroline/Pacific plate. Philippine Sea moved N post-25 Ma over northern East Asian Sea, forming N Philippine Sea arc that collided with SW Japan-Ryukyu margin in Miocene (~20-14 Ma).Etc.)

Xia, Y., X. Xu, Y. Niu & L. Liu (2017)- Neoproterozoic amalgamation between Yangtze and Cathaysia blocks: The magmatism in various tectonic settings and continent-arc-continent collision. Precambrian Research 309, p. 56-87.
(manuscript online at: http://dro.dur.ac.uk/21242/1/21242.pdf)
(Neoproterozoic amalgamation history of Yangtze and Cathaysia blocks, forming S China Block: (1) ~1000-860 Ma NW-ward intra-oceanic subduction and SE-ward ocean-continent subduction (with continental margin magmatism in Cathaysia Block); (2) ~860-825 Ma steepening subduction caused development of back-arc basin in intra-oceanic arc zone and slab rollback induced arc and back-arc magmatism in Cathaysia Block. NW-ward ocean-continent subduction formed continental margin magmatism in Yangtze Block; (3) ~825-805 Ma continent-arc-continent collision and final amalgamation between Yangtze and Cathaysia blocks (Jiangnan Orogen); (4) ~805-750 Ma collapse of Jiangnan Orogen and Nanhua rift basin formed)

Xu, C., H. Shi, C.G. Barnes & Z. Zhou (2016)- Tracing a late Mesozoic magmatic arc along the Southeast Asian margin from the granitoids drilled from the northern South China Sea. International Geology Review 58, p. 71-94.
(online at: www.researchgate.net/publication/281536288_Tracing_a_late_Mesozoic_magmatic arc Etc.)
(Granitoids drilled in N S China Sea two magmatic episodes: Late Jurassic (162-148 Ma) and E Cretaceous (137-102 Ma). Jurassic magmatism probably began in late M Jurassic, documented by inherited zircons. I-type granites, generated in continental arc environment. Arc granites of SCS, with accretionary wedge of Palawan terrane to SE and zone of lithospheric extension to N throughout SE China, define late Mesozoic SW-NE trench-arc-backarc setting for SE Asian continental margin, related to subduction of Paleo-Pacific slab beneath Asia)

Xu, C., L. Zhang, H. Shi, M.R. Brix, H. Huhma, L. Chen, M. Zhang & Z. Zhou (2017)- Tracing an Early Jurassic magmatic arc from South to East China Seas. Tectonics 36, 3, p. 466-492.
(E Jurassic granite and diorite in wells in NE SChina Sea and SW E China Sea (198-187 Ma), probably part of arc-related granitoids, that, along with SE Taiwan, may define E Jurassic NE-SW trending Dongsha-Talun-Yandang magmatic arc zone along East Asian continental margin paired with Jurassic accretionary complexes from SW Japan, E Taiwan to W Philippines. Arc-subduction complex associated with oblique subduction of Paleo-Pacific slab beneath Eurasia)

Xu, H.P., Y.C. Zhang, D.X. Yuan & S.Z. Shen (2022)- Quantitative palaeobiogeography of the Kungurian-Roadian brachiopod faunas in the Tethys: implications of allometric drifting of Cimmerian blocks and opening of the Meso-Tethys Ocean. Palaeogeogr. Palaeoclim. Palaeoecology 601, 111078, p. 1-15.
(Two new S and N Cimmerian paleobiogeographic subprovinces recognized, besides previously defined Cathaysian, Transhimalayan, Westralian and Austrazean provinces. Lhasa, Tengchong and Irrawaddy blocks (main parts of S Cimmerian Subprovince), probably situated near peri-Gondwanan region. S Qiangtang, Baoshan and Sibuma blocks of N Cimmerian Subprovince probably in temperate region of S Hemisphere during E-M Permian transition. Meso-Tethys Ocean may have existed before late E Permian)

Xu, J., Z. Ben-Avraham, T. Kelty & H.S. Yu (2014)- Origin of marginal basins of the NW Pacific and their plate tectonic reconstructions. Earth-Science Reviews 130, p. 154-196.

(Basins of Bohai Gulf, S China Sea, E China Sea, Japan Sea, Andaman Sea, Okhotsk Sea and Bering Sea typical geometry of dextral pull-apart. Java, Makassar, Celebes and Sulu Seas basins together with grabens in Borneo also dextral, transform-margin type basin system. Formation of gigantic linked dextral pull-apart basin system in NW Pacific due to NNE- to ENE-ward motion of E Eurasia, mainly response to Indo-Asia collision which started at ~50 Ma)

Xu, Y., P.A. Cawood, Y. Du, L. Hu, W. Yu, Y. Zhu & W. Li (2013)- Linking South China to northern Australia and India on the margin of Gondwana: Constraints from detrital zircon U-Pb and Hf isotopes in Cambrian strata. Tectonics 32, 6, p. 1547-1558.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/full/10.1002/tect.20099)
(Cambrian sedimentary rocks in S part of S China Craton derived from source to S or SE, beyond current limits of craton. U-Pb ages and Hf isotope data on detrital zircons from Cambrian two age peaks at 1120 Ma and 960 Ma, with εHf(t) values similar to coeval detrital zircons from W Australia and Tethyan Himalaya zone, respectively. ~1120 Ma detrital zircons likely derived from Wilkes-Albany-Fraser belt (between SW Australia-Antarctica); ~960 Ma zircons possibly sourced from Rayner-Eastern Ghats belt (between India-Antarctica). Suggesting S China was at nexus between India, Antarctica, and Australia along N margin of E Gondwana)

Xu, Y., P.A. Cawood, Y.S. Du, H. Huang & X. Wang (2014)- Early Paleozoic orogenesis along Gondwana's northern margin constrained by provenance data from South China. Tectonophysics 636, p. 40-51.
(Cambrian- Ordovician boundary unconformity in S part of S China Craton related to coeval orogenic activity along Indian margin of E Gondwana. Disconformity at base Ordovician part of regional break also documented in Himalaya, Qiangtang, Lhasa, Sibumasu and W Australia, with angular unconformity, metamorphism of older units and widespread magmatic activity. S China Craton also deformed and metamorphosed during mid-Paleozoic intra-continental Kwangsian orogeny, with regional angular unconformity between Devonian cover and metamorphosed pre-Devonian along with granite intrusion between 460-400 Ma)

Xue, F. (2017)- New understanding on the potentials and approaches of Pre-Tertiary carbonate reservoirs in Southeast Asia. Proc. Asia Petroleum Geoscience Conference and Exhibition (APGCE 2017), EAGE, Kuala Lumpur, 43213, p. 179-183. *(Extended Abstract)*

Yamashita, I., A. Surinkum, Y. Wada, M. Fujihara, M. Yokoyama, H. Zaman & Y. Otofuji (2011)- Paleomagnetism of the Middle-Late Jurassic to Cretaceous red beds from the Peninsular Thailand: implications for collision tectonics. J. Asian Earth Sciences 40, 3, p. 784-796.
(Paleomagnetic data of Jurassic- Cretaceous red sandstones from Peninsular Thailand suggests two opposite tectonic rotations in Trang area. As part of Thai-Malay Peninsula underwent CW rotation after Jurassic together with Shan-Thai and Indochina blocks. Between Late Cretaceous and M Miocene, as part of S Sundaland Block (incl. Peninsular Malaysia, Borneo and S Sulawesi), up to 24.5° ± 11° CCW rotation relative to S China Block. N boundary of CCW rotated zone between Trang area and Khorat Basin)

Yan, J.X. & H. Yin (2000)- Paleoclimatic constraints for early Permian paleogeography of Eastern Tethys. In: H. Yin et al. (eds.) Permian-Triassic evolution of Tethys and Western Circum-Pacific, Developments in Palaeontology and Stratigraphy 18, Elsevier, p. 1-15.
(Paleoclimate indicators used to distinguish major Asian blocks. Early Permian cooler climate areas with diamictites and Glossopteris flora, warm climates have fusulinid limestones, Gigantopteris floras, etc. Suggest N-ward movement in Permian of blocks like Sibumasu from S Hemisphere Gondwana to N Hemisphere Asia)

Yan, J.X. & D. Zhao (2001)- Advancement of the Mesotethys along the northern margin of the South China Sea. Marine Geol. Quaternary Geology, Beijing, 21, 4, p. 49-54.
(In Chinese. Marine Mesozoic strata along N margin of S China Sea indicate marine basin. Basin was large ocean in Mesozoic and can be traced W-ward to Mesotethys (Meratus suture of Kalimantan, and Woyla suture on Sumatra), E-ward ocean connected to extinct ocean in Sakawa zone of Japan through Taiwan Straits. Ocean closed around M Cretaceous, resulting from docking of N Palawan Terrane and Reed Bank terrane)

Yan, J.X. & K. Zhao (2001)- Permo-Triassic paleogeographic, paleoclimatic and paleoceanographic evolutions in eastern Tethys and their coupling. Sci. China, Ser. D, 44, p. 968-978.
(Permian and Triassic (Chihsian, Wujiapingian, Anisian and Norian) reconstructions and paleogeography of E Tethys area, mainly driven by paleoclimate records)

Yan, Q.S. & X.F. Shi (2007)- Hainan mantle plume and the formation and evolution of the South China Sea. Geol. J. Chinese Universities 13, 2, p. 311-322.
(Seismic tomographic images suggest possible mantle plume beneath and around Hainan island (sub-vertical low-velocity column, extending from shallow depths to 660-km seismic discontinuity and continuously to depth of 1900 km. Large quantity of Cenozoic alkali basalts distributed in S China Sea and adjacent areas)

Yan, Q., X. Shi, I. Metcalfe, S. Liu, T. Xu, N. Kornkanitnan, T. Sirichaiseth, L. Yuan, Y. Zhang & H.Zhang (2018)- Hainan mantle plume produced late Cenozoic basaltic rocks in Thailand, Southeast Asia. Nature Scientific Reports 8, 2640, p. 1-14.
(online at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5805767/pdf/41598_2018_Article_20712.pdf)
(Intraplate volcanism started after 16 Ma, shortly after cessation of seafoor spreading in S China Sea, affecting large areas. Geochemistry of Late Miocene- Pleistocene basalts from Khorat Plateau and Sukhothai arc terrane in Thailand show Oceanic Island Basalt -like characteristics. Post-spreading intra-plate volcanism around S China Sea region probably induced by Hainan mantle plume)

Yan, Y., B. Huang, D. Zhang, P. Charusiri & A. Veeravinantanakul (2018)- Paleomagnetic study on the Permian rocks of the Indochina Block and its implications for paleogeographic configuration and northward drifting of Cathaysialand in the Paleo-Tethys. J. of Geophysical Research: Solid Earth 123, 6, p. 4523-4538.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2018JB015511)
(Paleomagnetic constraints of Permian paleo-position of Indochina and its drifting history in Paleo-Tethys Ocean. E-M Permian limestones from Khao Khwang Platform in C Thailand (W margin of Indochina Block) were at paleolatitude 21 ± 6°S (now 15°N), supporting ~5,000 km N-ward transition of Indochina block from near Gondwana in E-M Permian (~280 Ma) to S margin of Eurasia by Late Triassic (Norian, ~220 Ma). Concurrent Permian N-ward drift history suggested for Indochina, North Qiangtang and South China blocks)

Yan, Y., B. Huang, J. Zhao, D. Zhang, X. Liu, P. Charusiri & A. Veeravinantanakul (2017)- Large southward motion and clockwise rotation of Indochina throughout the Mesozoic: paleomagnetic and detrital zircon U-Pb geochronological constraints. Earth Planetary Science Letters 459, p. 264-278.
(Paleomagnetic and U-Pb geochronologic study of Late Triassic-Cretaceous Huai Hin Lat and Nam Phong Fms in NE Thailand (W Khorat Plateau; part of Indochina Block). Paleolatitudes in Norian (<227 Ma) at 33 ± 7°N to Late Cretaceous 25 ± 5°N. Data indicate S-ward displacement with CW rotation)

Yan, Y., Q. Zhao, Y. Zhang, B. Huang, W. Zheng & P. Zhang (2019)- Direct paleomagnetic constraint on the closure of Paleo-Tethys and its implications for linking the Tibetan and Southeast Asian blocks. Geophysical Research Letters 46, 24, p. 14368-14376
(online at: https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2019GL085473)
(Paleo-latitudinal constraints on Paleo-Tethys suture zone in W Yunnan indicates N branch of Paleo-Tethys Ocean closed no later than Carnian (Late Triassic), and confirms geographic linkage between N Qiangtang and Indochina Blocks at least during E Permian- Late Triassic.

Yang, J., P.A. Cawood & Y. Du (2015)- Voluminous silicic eruptions during late Permian Emeishan igneous province and link to climate cooling. Earth Planetary Science Letters 432, p. 166-175.
(Case study for ~260 Ma Emeishan Large Igneous Province in S China, where silicic volcanic rocks are minor component of preserved rock due to extensive Late Permian erosion. Silicic volcanic rocks ~30% of volume of eroded Emeishan volcanics. Basalt-derived silicic eruptions released sulfur gases into higher atmosphere, contributing to climate cooling at Capitanian-Wuchiapingian transition at ~260 Ma)

Yang, J., P.A. Cawood, Y. Du, H. Huang & L. Hu (2014)- A sedimentary archive of tectonic switching from Emeishan plume to Indosinian orogenic sources in SW China. J. Geological Society, London, 171, 2, p. 269-280.
(U Permian- M Triassic sediments in Youjiang Basin, S China, record change from Late Permian within-plate mafic-dominated source to NW (zircons ages ~260 Ma; mainly from Emeishan Large Igneous Province), to E-M Triassic mixed magmatic arc-recycled orogenic source to W (subduction–collision rocks of Indosinian Orogeny) and E (recycled Precambrian- E Paleozoic rocks in S China hinterland))

Yang, K. (1998)- A plate reconstruction of the Eastern Tethyan orogen in Southwestern China. In: M.F.J. Flower et al. (eds.) Mantle dynamics and plate interactions in East Asia, American Geophysical Union (AGU) Geodynamics Series 27, p. 269-287.
(E Tethyan orogenic belt in SW China includes S Tibet, N Tibet, Baoshan-Shan-Thai, Changdu-Simao-Indochina and Zhongza terranes between India and Yangtze continental plates, separated by sutures with dismembered ophiolites and arc volcanic belts, recording series of closed Carboniferous- Tertiary Tethyan ocean basins. Lancangjiang suture records Permo-Carboniferous Tethyan ocean, separating Gondwanaland and Eurasia. Two phases (1) Carboniferous-Triassic spreading of Lancangjiang, Jinshajiang and Garze-Litang oceans and breakup of Changdu-Simao-Indochina and Zhongza terranes from S margin of Eurasia; (2) Triassic-Tertiary spreading of Nujiang and Yarlung Zangpo oceans associated with breakup of S Tibet, N Tibet and Baoshan-Shan-Thai terranes from N Gondwanaland)

Yap, S. (2002)- On the distributional patterns of Southeast-East Asian freshwater fish and their history. J. of Biogeography 29, 9, p. 1187-1199.
(Present-day fresh water fish distributions classified into 19 biogeographical zones/ main river systems Sundaic islands grouped into four pairs: Malay Peninsula- N Sumatra, C Sumatra-W Borneo, N Borneo-E Borneo-Sarawak and S Borneo-Java. Java is relatively small, but landbridge island connected it with large islands of Sumatra and Borneo during Pleistocene low sea level periods)

Yeh, M.W. & J.G. Shellnutt (2016)- The initial break-up of Pangaea elicited by Late Paleozoic deglaciation. Nature Scientific Reports 6, 31442, p. 1-9.
(online at: https://www.nature.com/articles/srep31442)
('Unconventional' hypothesis suggesting Permian rifting of Cimmerian ribbon terrane from S Tethys/ N Gondwana margin was driven by E Permian glacial-deglaciation. Mantle-plume model used to explain rift-related volcanism but Cimmerian rifts do not correlate well with pre-existing suture zones. Location and timing of Cimmerian rifting resulted from exploitation of structural heterogeneities within crust that formed due to repeated glacial-interglacial cycles in Late Paleozoic. Effects of continental deglaciation helped to create shape of Cimmeria and Neotethys (= Mesotethys; JTvG) Ocean)

Yin, An (2010)- Cenozoic tectonic evolution of Asia: a preliminary synthesis. Tectonophysics 488, p. 293-325.
(Cenozoic tectonic evolution model of Asia, including lateral extrusion of SE Asia between 32- 17 Ma after India- Asia collision)

Yin, Hongfu (1997)- Triassic biostratigraphy and palaeobiogeography of East Asia. In: J.M. Dickins (ed.) Late Palaeozoic and Early Mesozoic Circum-Pacific events and their global correlation, Cambridge University Press, p. 168-185.
(Timor Triassic faunas classified as 'Gondwanan Tethys' facies, similar to Lhasa- W. Birma?; different from 'India-Gondwana' and 'Cathaysian-Tethys'. Misolia is part of subtropical 'Gondwanan Tethys'. Gondwanan Tethys and Tropical Tethys merged in Late Triassic due to S-ward expansion of tropical-subtropical biota)

Yin, Hongfu, J.M. Dickins, G.R. Shi & J. Tong (eds.) (2000)- Permian-Triassic evolution of Tethys and Western Circum-Pacific. Developments in Palaeontology and Stratigraphy 18, Elsevier, 412p.
(Reviews of Permian-Triassic in mainland E Asia, New Zealand, etc. Little on Indonesia, New Guinea)

Yin, Hongfu & Y. Peng (2000)- The Triassic of China and its interregional correlation. In: H. Yin et al. (eds.) Permian-Triassic evolution of Tethys and Western Circum-Pacific, Developments in Palaeontology and Stratigraphy 18, Elsevier, p. 197-220.
(Review of Triassic stratigraphy of China. Six regions, incl. NW Pacific (marine), tropical Cathaysian Tethys and warm-temperate Gondwanan Tethys (Himalayas and SE extension into Yunnan-Tengchong area)

Yin, Hongfu, S.D. Wu, Y. Du, J. Yan & Y. Peng (1999)- South China as a part of archipelagic Tethys during Pangea time. Proc. Int. Conference on Pangea and the Paleozoic- Mesozoic transition, Wuhan 1999, p. 69-73.
(South China composed of several microplates in Late Paleozoic, at time when Eastern Tethys was an 'archipelagic Ocean' with numerous microplates that amalgamated into Paleoasia during Late triassic Indosinian orogeny)

Yin, Hongfu, K. Zhang & Q. Feng (1999)- The Archipelagic Ocean system of the Eastern Eurasian Tethys. Acta Geologica Sinica (English Edition) 78, 1, p. 230-236.
(Unlike typical oceans such as wide and 'clean' Atlantic, Tethys Ocean showed archipelagic pattern during all stages, especially E Tethys. Evolutionary history of Qinling-Qilian-Kunlun, S China and Xizang (Tibet) to Yunnan regions)

Yu, C., X. Shi, X. Yang, J. Zhao, M. Chen & Q. Tang (2017)- Deep thermal structure of Southeast Asia constrained by S-velocity data. Marine Geophysical Research 38, 4, p. 341-355.
(Deep thermal structure of SE Asia, derived from empirical relation between S-velocity and T. Temperature at depth of 80 km in rifted and oceanic basins (Thailand Rift Basin, Gulf of Thailand, Andaman Sea and S China Sea) is ~200 °C higher than in plateaus (Khorat Plateau, Sumatra Island) and subduction zones (Philippine Trench). Surface heat flow in S China Sea mainly dominated by deep thermal state. Temperatures at 100-120 km depths more uniform. Estimated base of lithosphere corresponds to ~1400 °C isotherm; good correlation with tectonic setting.

Zahirovic, S. (2020)- Resolving geological enigmas using plate tectonic reconstructions and mantle flow models. In: N. Scarselli et al. (eds.) Regional Geology and Tectonics, Vol. 1, Principles of geological analysis, 2nd. Edition, Chapter 6, Elsevier, p. 93-111.
(On geological and geophysical constraints into plate motion models that are integral to better understanding the formation and evolution of economic geological resources, as well as changes in Earth's biogeographic evolutionary trajectory. Including example section on ' Sundaland and New Guinea', p. 102-105, area of complex interaction of converging Indo-Australian, Eurasian and Pacific plates, where regional flooding patterns that are out of sync with global sea level. In Sundaland, accretion of the Woyla Arc onto Sumatra margin in Late Cretaceous (~80 Ma) led to a ~15 Myr interruption in arc volcanism and subduction, leading to several 100m of dynamic uplift. Renewed subduction by ~60 Ma (especially after ~30 Ma) led to progressive dynamic subsidence of Sundaland. Etc.)

Zahirovic, S., N. Flament, R.D. Muller, M. Seton & M. Gurnis (2016)- Large fluctuations of shallow seas in low-lying Southeast Asia driven by mantle flow. Geochem. Geophysics Geosystems 17, 9, p. 3589-3607.
(online at: http://ro.uow.edu.au/cgi/viewcontent.cgi?article=5216&context=smhpapers)
(On link between mantle flow and surface tectonics. SE Asia one of lowest lying continental regions in world, with half of continental area presently inundated by shallow sea. Widespread Late Cretaceous-Eocene regional unconformity in SE Asia likely driven by dynamic topography during a subduction hiatus, i.e. several 100m of emergence of Sundaland between ~80-60 Ma due to slab breakoff after Late Cretaceous collision of Gondwana-derived terranes with Sundaland. Renewed subduction from ~60 Ma re-initiated dynamic subsidence of Sundaland, leading to submergence from ~40 Ma)

Zahirovic, S., K.J. Matthews, N. Flament, R. Muller, K. Hill, M. Seton & M. Gurnis (2016)- Tectonic evolution and deep mantle structure of the eastern Tethys since the latest Jurassic. Earth- Science Reviews 162, p. 293-337.
(manuscript online at: www.academia.edu/28878030/Tectonic_evolution_and_deep_mantle_structure_of_the_eastern_Tethys_since_the_latest_Jurassic)

(Major review of plate tectonics of since 160 Ma. Rifting of 'Argoland' (E Java and W Sulawesi) in latest Jurassic from NW Australian shelf, likely colliding first with parts of Woyla intra-oceanic arc in M Cretaceous, and accreting to Borneo (Sundaland) core by ~80 Ma. Neo-Tethyan ridge likely consumed along intra-oceanic subduction zone S of Eurasia from ~105 Ma, leading to change in motion of Indian Plate by ~100 Ma)

Zahirovic, S., K. Matthews, Ting Yang, N. Flament, D. Garrad, G. Brocard, J. Iwanec, K. Hill, M. Gurnis, R. Hassan, M. Seton & D. Muller (2018)- Tectonics and geodynamics of the eastern Tethys and northern Gondwana since the Jurassic. Proc. Australian Exploration Geoscience Conference (AEGC 2018), Sydney, p. 1-6.
(Extended Abstract) (online at: http://www.publish.csiro.au/ex/pdf/ASEG2018abM1_1C)
(Evolution of E Neo-Tethys since latest Jurassic rifting along N Gondwana. New Guinea N-ward motion over subducted slabs (related to Sepik back-arc basin and Maramuni subduction system), resulted in long-term flooding of margin since ~20 Ma. Sundaland continental promontory dynamic uplift in latest Cretaceous-Eocene due to accretion of Woyla Arc at ~80 Ma, leading to slab breakoff and temporary interruption of subduction. Renewed subduction along Sunda margin resulted in renewed dynamic subsidence from ~30 Ma, amplified by regional basin rifting events. Sinking Sunda slab likely triggered mantle slab avalanche, resulting in contemporaneous basin inversion and dynamic subsidence from ~15 Ma)

Zahirovic, S., M. Seton & R.D. Muller (2014)- The Cretaceous and Cenozoic tectonic evolution of Southeast Asia. Solid Earth (EGU) 5, p. 227-273.
(online at: www.solid-earth.net/5/227/2014/se-5-227-2014.pdf)
(Major review and new model of tectonic evolution of SE Asia in last 155 My, with significant differences from R. Hall, I. Metcalfe and other plate reconstruction models. SW Borneo already part of SE Asia in Late Jurassic, and did not originate from NW Australia. SE Java and W Sulawesi blocks rifted off New Guinea margin in Late Jurassic, etc. With animation model in supplement)

Zakharov, Y.D., A.M. Popov & A.S. Biakov (2008)- Late Permian to Middle Triassic palaeogeographic differentiation of key ammonoid groups: evidence from the former USSR. Polar Research 27, p. 441-468.
(Incl. paleogeographic reconstructions with Late Permian- earliest Triassic (260- 247 Ma) distributions of ammonites in Paleotethys)

Zaw, K. (2014)- Metallogeny of mainland SE Asia. In: I. Basuki & A.Z. Dahlius (eds.) Sundaland Resources, Proc. Annual Conv. Indonesian Soc. Economic Geologists (MGEI), Palembang, p. 27-33.
(Brief review of mainland SE Asia mineral resources associated with complex tectonic history; see also Zaw (2014) paper below)

Zaw, K., C. Makoundi, M.B.I. Basori, G.T. Lai & Z.A. Rahman (2022)- Emerging trends in Earth science for sustainable futures in the SE Asia region. J. Asian Earth Sciences 237, 1, 105358, p. 1-9.
(online at: www.researchgate.net/publication/362617431_Emerging_trends_in_earth_science_for_sustainable_futures_in_the_SE_Asia_region)
(Review of recent key papers on regional geology of SE Asia)

Zaw, K., S. Meffre, C.K. Lai, C. Burrett, M. Santosh, I. Graham, T. Manaka, A. Salam, T. Kamvong & P. Cromie (2014)- Tectonics and metallogeny of mainland Southeast Asia- a review and contribution. Gondwana Research 26, p. 5-30.
(Review of SE Asia mineral resources associated with complex tectonic history of Gondwana supercontinent break-up, arc magmatism, backarc basin development and collisions that created present-day mainland SE Asia. This paper summarizes historical and current SE Asian geological research and ore deposit studies. Incipient arc/backarc basin magmatism is key to formation of many important ore deposits in Truong Son and Loei fold belts. Triassic to Cenozoic arc-continent and continent-continent collisions led to formation of sediment-hosted/orogenic gold deposits in Sukhothai and Sibumasu terranes. Oblique Cretaceous- Recent subduction along Andaman-Sunda trench responsible for gold and copper-gold-molybdenum porphyry and epithermal mineralization along arc in Myanmar and Sumatran volcanic arc)

Zenonos, A., L. De Siena, S. Widiyantoro & N. Rawlinson (2019)- P and S wave travel time tomography of the SE Asia-Australia collision zone. Physics Earth Planetary Interiors 293, 106267, p. 1-14.
(P and S wave tomography show clear evidence of subducted slabs penetrating into mantle along Sunda arc, Banda arc and Halmahera arc. Also evidence for slab gaps or holes near E Java. Banda arc slab single curved subduction zone. High velocity mantle connection between N Australia and E margin of Sunda arc)

Zhang, B.C., J.J. Fan, A.B. Luo & X.W. Zeng (2023)- Tectonic evolution of the Meso-Tethys Ocean in the Jurassic: birth, growth, and demise of a missing intra-oceanic arc. Gondwana Research 122, p. 41-59.
(online at: https://www.researchgate.net/publication/371434082_Tectonic_evolution_of_the_Meso-Tethys_Ocean_in_the_Jurassic_Birth_growth_and_demise_of_a_missing_intra-oceanic_arc)
(M Jurassic diabase and contemporaneous fore-arc basalts and boninites in Bangong-Nujiang suture zone, Tibetan Plateau, likely formed during intra-oceanic subduction initiation, while M-L Jurassic dacites, granodiorites, granites and andesites likely formed in mature intra-oceanic arc. Therefore, Meso-Tethys Ocean may contain ~1000 km long intra-oceanic subduction zone with M-L Jurassic mature intra-oceanic arc. Intra-oceanic subduction initiation at ~180 Ma. likely arose via subduction transfer caused by collision of oceanic plateau and S Qiangtang terrane at ~182-177 Ma.Middle-Late ~171-155 Ma intra-oceanic arc. Intra-oceanic arc W section potentially collided with S Qiangtang terrane at ~155-145 Ma (latest Jurassic); middle section potentially lasted until E Cretaceous)

Zhang, B.C., J.J. Fan, A.B. Luo, S.L. Sun & J.W. Bai (2024)- Middle-Late Jurassic subduction erosion caused by intra-oceanic arc subduction in central Tibet. Geological Society of America (GSA) Bull. 136, 9-10, p. 4035-4049. *(online at: https://www.researchgate.net/publication/378783701_Middle-Late_Jurassic_subduction_erosion_caused_by_intra-oceanic_arc_subduction_in_central_Tibet)*
(Dongco granodiorites in C Bangong–Nujiang suture of C Tibet ~158–155 Ma (~Kimmeridgean) originated from subducted oceanic plate, and contaminated with accretionary wedge when intruded Dongco ophiolite. suggesting Dongco ophiolite was emplaced in subducted accretionary wedge before Late Jurassic. Etc.)

Zhang, C.L., M. Santosh, Q.B. Zhu, X.Y. Chen & W.C. Huang (2015)- The Gondwana connection of South China: evidence from monazite and zircon geochronology in the Cathaysia Block. Gondwana Research 28, 3, p. 1137-1151.
(E Paleozoic structures, metamorphism and magmatic activity suggest Cathaysia (= SE part of S China block) collisional orogenic belt rather than intraplate type. Angular unconformity between Silurian- Devonian; transition from collision to post-collision at ~430 Ma. Some E Paleozoic clastics probably of Gondwana origin.)

Zhang, K.J. (1998)- The Changning-Menglian suture zone: a segment of the major Cathaysia-Gondwana divide in Southeast Asia- comment. Tectonophysics 290, p. 319-321.
(Commentary of Wu et al. 1995 paper. Jinshajiang-Ailaoshao suture is main Cathaysia- Gondwana divide in China, not Lancangjiang-Changning-Menglian suture)

Zhang, X., S.L. Chung, Y.M. Lai, A.A. Ghani, S. Murtadha, H.Y. Lee & C.C. Hsu (2019)- A 6000-km-long Neo-Tethyan arc system with coherent magmatic flare-ups and lulls in South Asia. Geology (GSA) 47, 6, p. 573-576.
(online at: https://www.researchgate.net/publication/332487986_A_6000-km-long_Neo-Tethyan_arc_system_with_coherent_magmatic_flare-ups_and_lulls_in_South_Asia)
(Magmatic arcs typically exhibit non-steady-state evolution with episodic flare-ups and lulls. Sumatra records long-lived magmatic arc, with detrital zircon data showing several Late Triassic- Miocene magmatic pulses (212-11 Ma). M Cretaceous- E Eocene zircons positive εHf(t) values, indicating juvenile magma sources and matching Gangdese batholiths in S Lhasa terrane. These suggest ~6000 km long Neo-Tethyan arc system from S Tibet to Sumatra with concurrent magmatic lulls (~150-105 and 85-65 Ma) and flare-ups (~105-85 and 65-40 Ma). Late Cretaceous magmatic lull coincided with strong regional deformation and increasingly fast N-ward drift of India. Periodic pulses of Neo-Tethyan arc magmatism most likely correlated with repeated steepening and shallowing of slab dip, rather than India-Eurasia convergence rates)

Zhang, X., S.L. Chung, Y.M. Lai, A.A. Ghani, S. Murtadha, H.Y. Lee & C.C. Hsu (2018)- Detrital zircons dismember Sibumasu in East Gondwana. J. of Geophysical Research: Solid Earth 123, 7, p. 6098-6110.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2018JB015780)
(Sibumasu not single united terrane derived from E Gondwana, and W Sumatra not linked to Cathaysia. Detrital zircon data show scarcity of E Neoproterozoic zircons in W Sumatra block, arguing against connection between W Sumatra and Cathaysia. Detrital zircons from E Sumatra similar to Lhasa, W Burma and W Australia (probably sourced from W Australia). Sibusima (= Sibumasu without E Sumatra) detrital zircon ages resemble S Qiangtang and Tethyan and High Himalaya terranes (likely derived from N India). In E Paleozoic, E Sumatra and W Burma outboard of Lhasa terrane along NW Australian margin; Sibusima on N Greater India margin)

Zhang, Z., J.H. Yang, J.H. Wu, W. Mao, . Hu & Yin-Peng Lu (2025)- Examining trace elements of cassiterite as fingerprints for tectonic settings of tin deposits: an example from the SE Asian tin province. J. Asian Earth Sciences 290, 106660, p.
(SE Asia major tin province, 2800km long/ 400km wide, with three metallogenic belts: Eastern, Central (Main Range) and Western belts, which formed in oceanic subduction, continental collision, and post-subduction extensional settings, respectively. Elemental composition of cassiterite (SnO_2) closely linked to geochemical characteristics of corresponding granites, allowing distinction of three belts and tectonic setting with 87% accuracy (Bangka-Belitung results place it in part of Central Belt))

Zhang, Z.K. & J.X. Zhang (1986)- Paleomagnetic research on the upper Carboniferous basalts in Baoshan block, Yunnan and the tectonic belonging of the block. Bull. Institute of Geology. Chinese Academy of Geological Sciences, p. 184-189.
(In Chinese with English abstract. Xu et al. 2014: Paleomagnetic work on E Permian Woniusi Fm basalts NE of Baoshan, SW China, suggest terrane was at 34.1° S in E Permian. Result comparable to Xu et al. 2014)

Zhang, Z.W., Q. Shu, X.Y. Yang, C. Wu, C. Zheng & J. Xu (2019)- Review on the tectonic terranes associated with metallogenic zones in Southeast Asia. In: Mesozoic metallogeny of Southeast Asia, J. of Earth Science (China) 30, 1, p. 1-19.
(online at: http://en.earth-science.net/en/article/doi/10.1007/s12583-019-0858-0)
(Review of relations between tectonic terranes and distribution of 24 tectonic-metallogenic zones in SE Asia)

Zhao, D. (2012)- Tomography and dynamics of Western-Pacific subduction zones. Monographs Environment Earth Planets 1, 1, p. 1-70.
(online at: www.terrapub.co.jp/onlinemonographs/meep/pdf/01/0101.pdf)

Zhao, D., S. Maruyama & S. Omori (2007)- Mantle dynamics of Western Pacific and East Asia: insight from seismic tomography and mineral physics. Gondwana Research 11, p. 120-131.
(Tomography of E Asia, the location of double-sided subduction zone where old Pacific plate subducts from E, and Indo-Australia plate subducts from S)

Zhao, X., R.S. Coe, S.A. Gilder & G.M. Frost (1996)- Palaeomagnetic constraints on the palaeogeography of China: implications for Gondwanaland. Australian J. Earth Sciences 43, 6, p. 643-672.
(Paleomagnetic data show three main blocks of China (North China, South China, Tarim) were at or near equatorial latitudes in E and M Paleozoic. Late Paleozoic data suggest they were too far N to be attached to Gondwanaland and suggest they rifted from Gondwanaland in Late Devonian and Carboniferous. Etc.)

Zharkov, M.A. & N.M. Chumakov (2001)- Paleogeography and sedimentation settings during Permian- Triassic reorganizations in biosphere. Stratigraphy and Geological Correlation 9, 4, p. 340-363.
(Artinskian- Kungurian Metaperrinites and Kungurian Perrinites faunas in Ratburi Group in N Central and S Central Thailand, represent part of Tethyan perrinitid belt from Crimea in W to Timor in E)

Zhong, D. (2000)- Paleotethysides in West Yunnan and Sichuan, China. Science Press, Beijing, p. 1-248.
(Collection of papers on evolution of W Yunnan- Sichuan, containing sector of Paleotethysides where it turns from E-W belts of Tibetan Plateau to N-S mountain belts of mainland SE Asia. Formed by closure of Paleotethys

in Late Paleozoic by collision of Gondwanan Tengchong and Baoshan Blocks with Eurasia (Yangtze, Simao blocks). Paleotethys composed of main intercontinental ocean with several smaller intra-continental oceans and troughs)

Zhong, D., L. Ding & F. He (1999)- Tectonic evolutional characteristics of the Eastern Paleo-Tethys in Southwest China. In: B. Ratanasthien & S.L. Rieb (eds.) Proc. Int. Symposium Shallow Tethys (ST) 5, Chiang Mai 1999, Dept. of Geological Science, Chiang Mai University, p. 153-164. *(ST5 book online at: https://library.dmr.go.th/elib/cgi-bin/opacexe.exe?op=mmvw&db=Main&skin=S&mmid=19206&bid=17374)*
(Review of Paleotethys ocean development in SW China/ SE Asia)

Zhou, Z. (1990)- The Early Mesozoic orogeny in the northern shelf of the South China Sea and its adjacent lands. In: X. Jin et al. (eds.) Proc. Symposium Recent contributions to the geological history of the South China Sea, Hangzhou 1990, p. 119-125.
(E Triassic continental collision (of Cimmerian Blocks) in SE China, marking beginning of E Mesozoic orogeny in region. In end-Jurassic, Borneo began rifting away from S China margin, creating Proto-South China Sea. Present S. China Sea has evolved after drifting away from S China margin of continental fragments such as N Palawan, Reed Bank, Xisha (Parecel) Islands, Zhongsha Islands and others)

Zhu, R., P. Zhao & L. Zhao (2022)- Tectonic evolution and geodynamics of the Neo-Tethys Ocean. Science China Earth Sciences 65, 1, p. 1–24.
(Review paper. Neo-Tethys Ocean was E-ward-gaping triangular oceanic embayment between Laurasia and Gondwana. Initiated from E Permian with microblocks rifting from N Gondwana margin (= Mesotethys phase of other authors?; JTvG), most of which collided with Eurasia in Late Triassic, closing Paleo-Tethys Ocean. Followed bysubduction of Neo-Tethys oceanic slab beneath newly formed S margin of Eurasia continent. Tibet and SE Asia characterized by multi-block riftings from Gondwana and multi-stage collisions with Eurasia. Etc.)

Ziegler, A.M., M.L. Hulver, A.L. Lottes & W.F. Schmachtenberg (1997)- Permian world topography and climate. In: I.P. Martini (ed.) Late glacial and post-glacial environmental changes- Quaternary, Carboniferous-Permian and Proterozoic, Oxford University Press, p. 111-146.

Ziegler, A.M., P.M. Rees, D.B. Rowley, A. Bekker, L. Qing & M.L. Hulver (1996)- Mesozoic assembly of Asia: constraints from fossil floras, tectonics, and paleomagnetism. In: A. Yin & M. Harrison (eds.) The tectonic evolution of Asia. Cambridge University Press, p. 371-400.
(Permian- Jurassic reconstructions of terranes of N parts of Asia (Eurasia- China) based on paleomagnetic and flora data. Little or nothing on SE Asia)

I.3. QUATERNARY VOLCANISM- INDONESIA

IX.1. Quaternary Volcanism: General and Outside Java

(This listing is a selection of the extensive body of literature on Indonesia volcanic activity and its products. Many additional titles on volcanism specific to one region are included under these regions. Also, papers on Java volcanoes and volcanics are in a separate chapter, III.3)

Abrams, L.J. & H. Sigurdsson (2007)- Characterization of pyroclastic fall and flow deposits from the 1815 eruption of Tambora volcano, Indonesia using ground-penetrating radar. J. Volcanology Geothermal Research 161, p. 352-361.
(online at: https://people.uncw.edu/abramsl/abrams-sigurdsson-volgeo-07.pdf)
(Ground-penetrating radar helps image and characterize fall and pyroclastic flow deposits from Tambora 1815 eruption. Reflection of interface between pre-eruption clay-rich soil and pyroclastics reaches maximum thickness of 4m. Soil surface terraced and used for agriculture and buildings)

Abdul-Jabbar, G., H. Rachmat & M. Nakagawa (2019)- Temporal change of Barujari Volcano magmatic process: inferred from petrological study of erupted products since AD 1944. Proc. 1st Workshop on Environmental Science, Society, and Technology, Medan 2018, Journal of Physics: Conference Series 1363, 012030, p. 1-6.
(online at: https://iopscience.iop.org/article/10.1088/1742-6596/1363/1/012030/pdf)
(Active Barujari volcano in Lombok Island is part of post caldera stage of Rinjani volcano. Strombolian to vulcanian type eruptions with mainly basaltic-andesitic lavas(54-56 wt% SiO_2). Minor petrological changes in erupted material through time from 1944 to 2015)

Ahmady. F.N. &, D. Santoso (2024)- The interpretation of subsurface structure beneath Banda Api Volcano inferred from gravity data. Proc. 5th Int. Conference Geoscience and Earth Resources Engineering, Bandung 2023, IOP Conference Series: Earth and Environmental Science 1437, 012017, p. 1-4.
(online at: https://iopscience.iop.org/article/10.1088/1755-1315/1437/1/012017/pdf)
(Bouguer anomaly range over Mount Banda Api- Neira complex is 130-200 mgal. Low gravity anomaly at center of Banda Api Volcano, likely response to presence of magma. Low gravity pocket also near hot spring area and ancient caldera of Neira, also indicating location of Neira magma chamber that has not cooled off)

Andreastuti, S., A. Budianto & E.T. Paripurno (2018)- Integrating social and physical perspectives of mitigation policy and practice in Indonesia. In: C.J. Fearnley et al. (eds.) Observing the volcano world- Volcano crisis communication, Advances in Volcanology, Springer Open, p. 307-320.
(online at: https://link.springer.com/content/pdf/10.1007/978-3-319-44097-2.pdf)

Andreastuti, S. D., N. Haerani, K. Kristianto, A.S. Prayoga, R. Putra, H.Y. Mboro et al.(2025)- Insight into the 2024-2025 eruption of Lewotobi Laki-Laki Volcano in Flores Island, Indonesia: an overview Indonesian J. on Geoscience (IJOG) 12, 3, p. 1-9.
(online at: https://ijog.geologi.esdm.go.id/index.php/IJOG/article/view/1318/516)

Ardianto, A.D. Nugraha, H. Afif, D.K. Syahbana, D.P. Sahara, Zulfakriza, S. Widiyantoro et al. (2021)- Imaging the subsurface structure of Mount Agung in Bali (Indonesia) using volcano-tectonic (VT) earthquake tomography. Frontiers in Earth Science 9, 619587, p. 1-13.
(online at: https://www.frontiersin.org/articles/10.3389/feart.2021.619587/full)
(Tomography from volcano-tectonic events in late 2017. Low seismicity zone at 2-5 km below Mt. Agung summit may be related to shallow magma reservoir.Anomalous region between Mt. Agung and Batur where most earthquakes before 2017 eruption originated, may be related to dyke complex between 8-14 km)

Arif, A.K.D., I.B.O. Agastya, R. Permadi, R. Marsaoly & I.K. Waliyanti (2024)- Utilization of geodiversity of Mount Gamalama eruption products as geotourism activities on the Batu Angus Geotrail, aspiring Ternate

Geopark. Proc. The 5th Geotourism Festival & International Conference, 2024, 16p. *(online at: www.academia.edu/122039752/UTILIZATION_OF_GEODIVERSITY_OF_MOUNT_GAMALAMA etc.)*
(Mt Gamalama active stratovolcano on Ternate island in W Halmahera island arc, with geotourism potential. 1715m high, with lava, pyroclastics and lahars. First known eruption in historical times in 1538, then in 1687, 1772, 1775, 1839, 1843, 1864 and 1907)

Asrafil, A. Mukaddas, T. Hilmansyah, M.U. Botjing & E. Yuliastri (2020)- Mineralization study of volcanic rocks in Colo Volcano Tojo Una-Una Central Celebes. Jurnal Geomine, 8, 3, p. 171-180.
(online at: https://jurnal.teknologiindustriumi.ac.id/index.php/JG/article/download/705/pdf)
(Colo volcano on Una Una island, Gulf of Tomini, C Sulawesi, dominated by pyroclastic deposits, also some andesites. Hydrothermal alteration minerals present)

Bahar, I. & M. Girod (1983)- Controle structural du volcanisme indonesien (Sumatra, Java-Bali); application et critique de la method de Nakamura. Bull. Societe Geologique France (7), 25, 4, p. 609-614.
('Structural control on Indonesian volcanism (Sumatra, Java-Bali); application and critique of the Nakamura method')

Bani, P., Kristianto, S. Kunrat & D.K. Syahbana (2020)- Insights into the recurrent energetic eruptions that drive Awu, among the deadliest volcanoes on Earth. Natural Hazards Earth System Sciences 20, 8, p. 2119-2132.
(online at: https://nhess.copernicus.org/articles/20/2119/2020/nhess-20-2119-2020.pdf)
(Little known Awu volcano largest and northermost active volcano of Sangihe arc and among most deadliest. Regional geodynamic setting controlled by divergent-double-subduction collision and arc-arc collision, causing stalling of slab in mantle, increasing temperature, and becoming prone to melting. Awu also hosted lava dome and crater lake throughout its activity, creating hazardous situation (no mention of work by Kemmerling (1923))

Bani, P., F. Nauret, C. Oppenheimer, A. Aiuppa, B.U. Saing, N. Haerani, H. Alfianti, M.Marlia & V.Tsanev (2021)- Heterogeneity of volatile sources along the Halmahera arc, Indonesia. J. Volcanology Geothermal Research 418, 2, 107342, p. 1-12.
(Gas measurements and geochemical analyses of lavas for Dukono, Ibu, Gamkonora, Gamalama and Makian volcanoes of W Halmahera arc. Dukono greatest source of SO_2 and H_2; Ibu emits most H_2O and H_2S. Gamalama and Ibu significant CO_2 sources; Dukono (farthest from trench) CO_2-poor gas. Volcanic rocks composition variability along Halmahera arc indicates decreasing subducted sediment contribution from S (Makian, Gamalama) to N (Gamkonora, Ibu, Dukono))

Bani, P., C. Oppenheimer, V. Tsanev, B. Scaillet, S. Primulyana, U.B. Saing, H. Alfianti & M. Marlia (2022)- Modest volcanic SO_2 emissions from the Indonesian archipelago. Nature Communications 13, 3366, p. 1-15.
(online at: https://www.nature.com/articles/s41467-022-31043-7)
(New gas measurements from Indonesian volcanoes suggest rel. modest volcanic SO_2 emissions. Sulfur-rich eruptions reflect long-term accumulation of volatiles in reservoirs. Wit useful map of 126 active volcanoes)

Bani, P., G. Tamburello, E.F. Rose-Koga, M. Liuzzo, A. Aiuppa, N. Cluzel, I. Amat, D.K. Syahbana, H. Gunawan & M. Bitetto (2018)- Dukono, the predominant source of volcanic degassing in Indonesia, sustained by a depleted Indian-MORB. Bulletin of Volcanology 80, 5, p. 1-14.
(online at: www.researchgate.net/profile/Philipson-Bani/publication/321627294_Dukono_the_predominant_so Etc.)
(Little known Dukono volcano on N Halmahera island regularly erupting since 1933. Gas emissions show huge magmatic volatile contribution into atmosphere, with annual output of ~290 kt SO_2, 5000 kt H2O, 88 kt CO_2, 5 kt H_2S and 7 kt H2 (in top 10 volcanic SO_2 sources on Earth). Degassing sustained by depleted Indian-MORB mantle source, currently undergoing lateral pressure from steepening of subducted slab, downward force from Philippine Sea plate and W-ward motion of continental fragment along Sorong fault)

Behringer, W. (2015)- Tambora und das Jahr ohne Sommer: Wie ein Vulkan die Welt in die Krise sturzte. Verlag C.H. Beck, Munich, p. 1-398.
('Tambora and the year without summer. How one volcano dragged the world into crisis')

Bennett, D., T. Ubide, J.F Ward, A. MacDonald, G. Rosenbaum, F.M.H. Sihombing, R.P. Nugroho, G.A. Jabbar & A.T. Tapu (2025)- Magmatic architecture of a potassic arc volcano: Batu Tara, Eastern Sunda Arc, Indonesia. Journal of Petrology 66, 9, egaf071, p. 1-24.
(online at: https://academic.oup.com/petrology/article/66/9/egaf071/8234243)
(Batu Tara volcano, 50 km N of Flores, is located off-axis to main E Sunda arc, where the slab reaches depths of ~230 km. Base of volcano ~3000m below sea level, with additional 630m above sea level. Ultrapotassic mafic plagioclase-free magmas with abundant clinopyroxene, leucite and olivine. Batu Tara, and possibly other anomalous arc volcanoes with mafic compositions, fed by relatively direct transfer of mafic melts from depth)

Blumenthal, M. (1921)- Bergwanderungen und Bergstudien auf der Insel Lombok. Jahrbuch der Schweizer Alpenclub 55 (1920), p. 55-
('Mountain hikes and mountain studies on Lombok Island'. Well illustrated account of a 1918 ascent of the Rinjani volcano complex, during a private trip by Swiss BPM geologist). The current active Rinjani volcano is located within large a caldera lake named Segara Anak (formed during explosive eruption of Mount Samalas volcano in 1257; HvG). Highest part of Rinjani calder rim is at 3795m above sea level)

Bouvet de Maisonneuve, C. & O. Bergal-Kuvikas (2020)- Timing, magnitude and geochemistry of major Southeast Asian volcanic eruptions: identifying tephrochronologic markers. J. Quaternary Science 35, 1-2, p. 272-287.
(online at: https://onlinelibrary.wiley.com/doi/pdfdirect/10.1002/jqs.3181)
(20 well-dated Quaternary VEI 6-8 eruptions with widespread tephra deposits in Indonesia and Philippines. Three oldest events: Toba Tuffs at 1.2 Ma, 0.79 Ma and 0.50 Ma. Youngest Pinatubo eruptin in 1991)

Bronto, S. (2003)- Kendala penerapan satuan stratigrafi gunungapi. Majalah Geologi Indonesia 18, p. 23-37.
('Obstacles in the application of volcanic stratigraphic units')

Bronto, S. (2006)- Fasies gunung api dan aplikasinya. Jurnal Geologi Indonesia 1, 2, p. 59-71.
(online at: http://ijog.geologi.esdm.go.id/index.php/IJOG/article/view/9/9)
('Volcanic facies and its applications'. Composite volcanic cones can be divided into (1) central facies (subvolcanic intrusions, lava domes, hydrothermally altered rocks), (2) proximal facies (alternating lava flows and pyroclastic breccias), (3) medial facies (pyroclastic breccias, laharic breccias) and (4) distal facies (fine epiclastic rocks). Tuff can be widely distributed)

Bronto, S. (2013)- Geologi gunung api purba. Badan Geologi, Bandung, p. 1-184.
(online at: https://www.academia.edu/40346127/Geologi_Gunung_Api)
('Geology of ancient volcanoes'. General overview of volcanic processes and volcanic deposits, with examples from Indonesia (Second edition of initial 2010 publication))

Bronto, S., E. Budiadi & H.G. Hartono (2004)- Permasalahan geologi gunungapi di Indonesia. Majalah Geologi Indonesia (IAGI) 19, 2, p. 91-105.
(online at: https:// repository.itny.ac.id/id/eprint/2590/1/2_Permasalahan%20Geologi%20Gunungapi%20di%20Indonesia.pdf)
('Problems in volcanic geology in Indonesia')

Bronto, S., R.D. Hadisanto & J.P. Lockwood (1982)- Peta geologi Gunungapi Gamalama, Ternate, Maluku Utara 1:50,000. Direktorat Vulkanologi Indonesia, Bandung.
(online at: https://vsi.esdm.go.id/gallery/picture.php?/86/category/9)
('Geologic map of the Gamalama volcano, Ternate, North Moluccas'. Active Quaternary stratovolcano, qhich formed Ternate island, W of Halmahera. Historic eruptions with lava flows in 1737, 1763 and 1907. Young pyroclastics in 1980)

Bronto, S., J.Y. Sianipar & A.K. Pratopo (2016)- Volcanostratigraphy for supporting geothermal exploration. Proc. 5th ITB Int. Geothermal Workshop (IIGW2016), Bandung 2016, IOP Conference Series: Earth and Environmental Science 42, 012014, p. 1-11.
(online at: https://iopscience.iop.org/article/10.1088/1755-1315/42/1/012014/pdf)
(Brief general review of volcanoes and volcanic deposits)

Bronto, S. & Surono Martosuwito (eds.) (2014)- Indonesian arc magmatism- a collection of papers by Professor Udi Hartono. Center for Geological Survey (CGS), Geological Agency, Bandung, p. 1-623.
(Reprint collection of 39 papers, originally published between 1987-2011)

Broom-Fendley, S. (2014)- Chemistry and tectonic setting of Una-Una Volcano. M.Sc. Thesis, London University, p. . *(Unpublished)*
(On Una-Una isolated volcano in Gorontalo Bay, North Sulawesi, in complex tectonic setting)

Broom-Fendley, S., M. Thirlwall, M. Cottam & R. Hall (2011)- Geochemistry and tectonic setting of Una-Una Volcano, Sulawesi, Indonesia. Proc. Goldschmidt Conference Abstracts, Prague 2011, Mineralogical Magazine 75, 3, p. 585. *(Abstract only)*
(online at: https://goldschmidtabstracts.info/abstracts/abstractView?id=2011005729)
(Volcanic rocks from Una-Una (<~100 Ka) and nearby Togian islands (~2 Ma) both alkaline or high-K calc-alkaline trachyte. Elevated isotopic values and geochemistry indicate ancient continental contribution to magma source. Una-Una and Togian Islands products of young extension of Gorontalo Bay, due to slab rollback providing mechanism for upwelling of premetasomatised mantle)

Bronnimann S. & D. Kraemer (2016)- Tambora und das «Jahr ohne Sommer» 1816. Klima, Mensch und Gesellschaft. Geographica Bernensia, Bern, G90, p. 1-48.
(online at: https://boris.unibe.ch/83607/2/tambora_d_webA4.pdf)
('Tambora and the "year without summer" 1816, climate, humanity and society'. Elegant review)

Bronto, S. (1982)- Fasies Gunungapi Gamalama. Volcanological Survey (PVMBG).
('Volcanic facies of Gamalama', Ternate Island, Moluccas)

Bronto, S., R. Hadisantono & J. Lockwood (1982)- Peta geologi Gunungapi Gamalama, Ternate, Maluku Utara, 1:25,000. Direktorat Vulkanologi, Bandung.
('Geological map of the Gamalams volcano, Ternate, North Moluccas. 1:25,000 scale)

Brouwer, H.A. (1916)- Het vulkaaneiland Roeang (Sangi eilanden) na de eruptie van 1914. Tijdschrift Kon. Nederlandsch Aardrijkskundig Genootschap 33, p. 89-94.
(online at: www.delpher.nl/nl/tijdschriften/...)
('The volcanic island Ruang (Sangi Islands) after the eruption of 1914'. Report of changes several months after the May 1914 eruption)

Brouwer, H.A. (1921)- Het vulkaaneiland Roeang. Jaarboek Mijnwezen Nederlandsch Oost-Indie 49 (1920), Verhandelingen 2, p. 6-30.
('The volcano island Raung'. Active volcano in Sangi islands group)

Brouwer, H.A. (1921)- Sur les domes volcaniques des volcans actifs de l'archipel Malais. Zeitschrift fur Vulkanologie, 1921, 6, 2, p. 37-46.
(online at: https://books.google.com/books?id=kBw0AQAAMAAJ&pg=PA1&lpg=PA1&dq=Die+Vulka etc.)
('On the lava domes of the active volcanoes in the Malay Archipelago' (= Indonesia). Lava domes known from Merapi (1836), Galunggung (1918) and Raung (1914; Sanggi islands). Unusual Recent andesite lava from submarine volcano W of Mahengetang in Sangi islands with hornblende instead of usual pyroxene (augite))

Brouwer, H.A. (1921)- Sur l'eruption d'une andesite a hornblende dans l'Archipel malais. Comptes Rendus Academie Sciences, Paris 173, p. 240-242.
('On the eruption of an andesite with hornblende in the Malay Archipelago')

Brouwer, H.A. (1939)- Leucite rocks of the active volcano Batoe Tara (Malay Archipelago). Proc. Koninklijke Nederlandse Akademie van Wetenschappen, Amsterdam, 42, 1, p. 23-29.
(online at: https://dwc.knaw.nl/DL/publications/PU00017280.pdf)
(Batoe Tara or Komba ~50 km N of Lomblen, E of Flores, rises from deep sea to nearly 750m above sea-level. Active volcano with different types of leucite rocks: leucite basanite, biotite-leucite tephrites, etc.)

Brouwer, H.A. (1946)- Vulkanen. Servire's Encyclopedie in Monografieen, Servire, The Hague, 1-154.
(online at: https://www.delpher.nl/nl/boeken/)
(Popular general review of volcanonoes and volcanism. With many examples from the Indonesia, including descriptions of volcanoes Raung, Merapi and Krakatau)

Budd, D.A., V.R. Troll, F.M. Deegan, E.M. Jolis, V.C. Smith, M.J. Whitehouse, C. Harris, C. Freda, D.R. Hilton, S.A. Halldorsson & I.N. Bindeman (2017)- Magma reservoir dynamics at Toba caldera, Indonesia, recorded by oxygen isotope zoning in quartz. Nature Scientific Reports 7, 40624, p. 1-11.
(online at: https://www.nature.com/articles/srep40624.pdf)
(Quartz crystals from 75ka Toba tuffs rel. high δ18O values (up to 10.2‰), due to magma residence within and assimilation of local granite basement. Decrease in δ18O values in outer growth zones suggests assimilation of altered roof material and may represent eruption trigger in large Toba-style magmatic systems)

Budianto, A., M.N. Kartadinata & Kusdaryanto (1993)- Peta geologi Gunungapi Karangetan, Sulawesi Utara, 1:50,000. Direktorat Vulkanologi Indonesia, Bandung.
(online at: https://vsi.esdm.go.id/gallery/picture.php?/87/category/9)
('Geologic map of the Karangetan Volcano, North Sulawesi'.1827m-high Quaternary active volcano on Siau island; Sangihe Arc)

Buhring, C., M. Sarnthein & Leg 184 Shipboard Scientific Party (2000)- Toba ash layers in the South China Sea: evidence of contrasting wind directions during eruption ca. 74 ka. Geology (GSA) 28, 3, p. 275-278.
(online at: https://pages.mtu.edu/~raman/papers2/Buhring.pdf)
(Cores from southern S China Sea with up to 3.5 cm thick ash layers with rhyolithic glass shards. Dated at ~74 ka (O-isotope Stage 4-5 boundary), same age as youngest Toba eruption in N Sumatra. Composition of glass similar to Toba ash. Youngest Toba ash layers in S China Sea expand previously known ash-fall zone over >1800 km to E and increased volume estimates of erupted Toba ash (see also comments by Chen et al. 2000))

Carey, S. & H. Sigurdsson (1992)- Generation and dispersal of tephra from the 1815 eruption of Tambora volcano, Indonesia. In: E.T. Degens, H.K. Wong & M.T. Zen (eds.) The sea off Mount Tambora, Mitteilungen Geologisch-Palaontologisch Institut, Universitat Hamburg 70, p. 207-226.

Caron, B., G. Del Manzo, B. Villemant, A. Bartolini, E. Moreno, A. Le Friant, F. Bassinot, F. Baudin & A. Alves (2023)- Marine records reveal multiple phases of Toba's last volcanic activity. Nature Scientific Reports 13, 11575, p. 1-11.
(online at: https://www.nature.com/articles/s41598-023-37999-w)
(Young Toba Tuff (YTT), dated around 74 ka BP, considered as a short-lived explosive cataclysmic super-eruption. Marine core BAR94-25 off NW tip of Sumatra shows Toba complex volcanic succession of at least 17 layers of tephra and cryptotephra, subdivided in 3 main phases over ~ 50 kyr. Main volcanic activity during phase two, including YTT, likely composed of 6 eruptive events within ~ 10 ka)

Carr, B.B., E. Lev, L. Vanderkluysen, D. Moyer, G.I. Marliyani & A.B. Clarke (2022)- The stability and collapse of lava domes: Insight from photogrammetry and slope stability models applied to Sinabung Volcano (Indonesia). Frontiers in Earth Science 10, 813813, p. 1-17.
(online at: https://www.frontiersin.org/articles/10.3389/feart.2022.813813/full)

(Lava domes form by eruption of high-viscosity lava and are unstable and prone to collapse. Active collapses are driven directly by lava effusion. Passive collapses not correlated with effusion rate, and more difficult to assess and forecast. New workflow for using topographic models derived at Sinabung by photogrammetry)

Carter, N.L., C.B. Officer, C.A. Chesner & W.I. Rose (1986)- Dynamic deformation of volcanic ejecta from the Toba caldera: possible relevance to Cretaceous/Tertiary boundary phenomena. Geology (GSA) 14, 5, p. 380-383.
(Plagioclase and biotite phenocrysts in ignimbrites erupted from Toba caldera show microstructures and textures indicative of shock stress levels >10 GPa)

Casadevall, T.J., L. Pardyanto, H. Abas & Tulus (1989)- The 1988 eruption of Banda Api volcano, Maluku, Indonesia. Geologi Indonesia 12, p. 603-635.

Caudron, C., A. Bernard, S. Murphy, S. Inguaggiato & H. Gunawan (2018)- Volcano-hydrothermal system and activity of Sirung volcano (Pantar Island, Indonesia). J. Volcanology Geothermal Research 357, p. 186-199.
(Sirung 862m high, frequently active volcano on S Pantar island (Lesser Sunda Islands arc, N of W Timor). With 2 km wide caldera and active crater with several hydrothermal features including crater lake).

Chaussard, E. & F. Amelung (2012)- Precursory inflation of shallow magma reservoirs at west Sunda volcanoes detected by InSAR. Geophysical Research Letters 39, L21311, p. 1-6.
(Interferometric Synthetic Aperture Radar data across Sumatra-Java- Bali arc provided evidence of inflation at six volcanoes (Sinabung and Kerinci in Sumatra; Slamet, Lawu, and Lamongan in Java; Agung in Bali), three of which erupted after observation period (Sinabung, Kerinci, Slamet). These volcanoes have shallow magma reservoirs. Globally, arc volcanoes in extensional and strike-slip settings (W Sunda) can develop shallow reservoirs, whereas volcanoes in compressional settings may lack them)

Conte, A.M., C. Freda, M. Gaeta, D.M. Palladino, P. Scarlato, J. Taddeucci & R. Trigila (1999)- Mechanism for the 1983 eruption of Colo Volcano, Una-Una Island, Indonesia. Acta Vulcanologica 11, 2, p. 245-254.

Cooke, B. (2017)- Petrology and geochemistry of Sangeang Api and recent volcanism in the Sumbawa-Flores sector of the Sunda Arc: the response of along-arc geochemistry to subduction processes. Ph.D. Thesis, University of Adelaide, p. 1-540.
(online at: https://digital.library.adelaide.edu.au/items/118176fa-d4ec-477a-aec9-bb69e7a306c4)
(Study of active volcano Sangeang Api volcano off NE Sumbawa, which erupts co-magmatic suites of lavas and mafic-ultramaficcumulate xenoliths (silica-undersaturated alkalic shoshonitic basalts to basaltic trachy-andesites) and previously unstudied extinct volcanoes from adjacent sectors of E Sunda Arc. Doro Kota and Doro Kuta (E Sumbawa; ~2 Ma) lavas similar to Sangeannng Api. Wai Sano (W Flores) with adakites, unique in Sunda Arc, possibly from melting of underplated basalts. Ultrapotassic magmatism in Sunda Arc confined to rear-arc and with trace-element and isotopic evidence of mantle metasomatism and influence of slab tear windows).

Cooke, R.J.S., J.T. Baldwin & T.J. Sprod (1976)- Recent volcanoes and mineralization in Papua New Guinea. 25th International Geological Congress, Sydney, Excursion Guide 53AC, p. 1-32.
(Fieldtrip guide to young volcanoes of SE PNG Peninsula, Bougainville and New Britain)

Costa, A., V.C. Smith, G. Macedonio & N.E. Matthews (2014)- The magnitude and impact of the Youngest Toba Tuff super-eruption. Frontiers in Earth Science 2014, 2, 16, p. 1-8.
(online at: http://journal.frontiersin.org/article/10.3389/feart.2014.00016/full)
(Model of ash distribution and volume of Youngest Toba Tuff, erupted 75,000 years ago. Eruption dispersed ~8600 km^3 of ash (= ~3800 km^3 dense rock equivalent/ DRE), covering ~40 million km^2 with >5 mm of ash. Total volume (incl. 1500 km^3 DRE pyroclastic density current deposits on Sumatra) was ~5300 km^3 DRE)

De Silva, S.L., A.E. Mucek, P.M. Gregg & I. Pratomo (2015)- Resurgent Toba- field, chronologic, and model constraints on time scales and mechanisms of resurgence at large calderas. Frontiers in Earth Science 3, 25, p. 1-17.
(online at: https://www.frontiersin.org/articles/10.3389/feart.2015.00025/full)
(Samosir Island in Lake Toba caldera was submerged below lake level (~900m above s.l.) at 33 ka. Since then uplifted 700m as tilted block dipping to W. 14C ages and elevations of sediment reveal minimum uplift rates of ~4.9 cm/yr from ~33.7-22.5 ka, but diminished to ~0.7 cm/yr after 22.5 ka)

De Hoog, J.C.M. (2001)- Behavior of volatiles in arc volcanism. Geochemical and petrologic evidence from active volcanoes in Indonesia. Doct. Thesis University of Utrecht, Geologica Ultraiectina 204, p. 1-220.
(online at: http://igitur-archive.library.uu.nl/dissertations/1954688/full.pdf)
(Extensive review of volatile elements in Indonesian arc volcanoes (Galunggung, Lewotolo, etc.)

De Hoog, J.C., G.W. Koetsier, S. Bronto, T. Sriwana & M.J. van Bergen (2001)- Sulfur and chlorine degassing from primitive arc magmas: Temporal changes during the 1982-1983 eruptions of Galunggung (West Java, Indonesia). J. Volcanology Geothermal Research 108, p. 55-83.
(The 1982–1983 eruptions of Galunggung represent a 9-month period of intermittent volcanic activity with significant changes in explosivity (Vulcanian explosions changing gradually to Strombolian activity) and emission of volatiles (sulfur, chlorine. Compositions of juvenile material changed from basaltic andesite to high-Mg basalt, which are among the most primitive rock types known in the Indonesian arc system. Etc.))

De Hoog, J.C., B.E. Taylor & M.J. van Bergen (2001)- Sulfur isotope systematics of basaltic lavas from Indonesia: implications for the sulfur cycle in subduction zones. Earth Planetary Science Letters 189, p. 237-252.
(Sulfur isotope compositions of basaltic and basaltic andesite lavas from 7 modern volcanoes of Java and Lesser Sunda islands range in d14S from +2.0 to +7.8, average +4.7. Magmas in Indonesian arc system originate from mantle sources enriched in 34S relative to MORB and OIB sources. Enrichment in 34S reflects addition of slab-derived material, presumably from sediments rather than altered oceanic crust)

De Hoog, J.C.M., B.E. Taylor & M.J. van Bergen (2009)- Hydrogen-isotope systematics in degassing basaltic magma and application to Indonesian arc basalts. Chemical Geology 266, 3, p. 256-266.
(Predictive model for hydrogen-isotope shifts during degassing of basaltic-andesitic magma, from samples from 7 volcanoes along Sunda and Sangihe arcs (Batur, Rinjani, Guntur, Galunggung, Krakatau, Soputan, etc.))

De Jong Boers, B. (1995)- Mount Tambora in 1815: a volcanic eruption in Indonesia and its aftermath. Indonesia (Cornell University) 60, p. 37-59.
(online at: https://ecommons.cornell.edu/handle/1813/54071)
(Detailed historic account of Tambora 1815 eruption and its consequences. No geology)

De Neve, G.A. (1951)- Luchtverkenningen boven de vulkanen van Sumatra, Java en de Kleine Sunda Eilanden. De Ingenieur in Indonesie 3, 2, p. IV.13- IV.22.
(online at: http://colonialarchitecture.eu/islandora/object/uuid%3A06ae693a-f6c5-4059-b67b-6a508aba5680/datastream/PDF/view)
('Aerial reconnaissance above the volcanoes of Sumatra, Java and the Lesser Sunda Islands')

De Neve, G.A. (1952)- Volcanological investigations in co-operation with the AURI (1950-1952). Berita Gunung Berapi, Volcanological Survey Indonesia, Bandung, 1, 1-2, p. 34-65.
(With assistence of Indonesian Air Force the number of known active volcanoes in Indonesia increased to 167. 15 new centers of volcanic activity identified in Sumatra, N Sulawesi and Flores since count of 152 by Stehn (1940))

De Neve, G.A. (1953)- Rapport concernant l'activite volcanique en Indonesie pendant le premier trimestre del'annee 1953. Berita Gunung Berapi 3-4, Volcanological Survey Indonesia, Bandung, p. 3-16.
('Report on the volcanic activity in Indonesia during the first trimester of the year 1953' (in French!?))

Della-Pasqua, F.N., V.S. Kamenetsky, M. Gasparon, A.J. Crawford & R. Varne (1995)- Al-spinels in primitive arc volcanics. Mineralogy and Petrology 53, p. 1-26.
(Al-rich spinels common in alpine peridotites and in certain metamorphic rocks, but rare in terrestrial volcanic rocks. Descriptions of occurrences of Al-rich spinel inclusions in olivine phenocrysts in island arc volcanics from five localities, including basaltic andesites of Bukit Mapas (S Sumatra) and high-K shoshonitic ankaramites of SE Bali)

Dewanto, B.G., H. Rachmat, E. Kriswati, M. Yanis, A.F. Shomim & A.M. Julius (2023)- Study of geothermal and volcanic activity at Mount Awu, the deadliest active volcano in North Sulawesi Province, Indonesia using Optical Satellite Imagery. J. Volcanology Geothermal Research 438, 107811, p.
(Awu volcano in N part of Sangihe Island, with eruptions in 1964, 1994, 2004, etc.))

Dosso, L., J.L. Joron, R.C. Maury & H. Bougault (1987)- Isotopic (Sr, Nd) and trace element study of back-arc basalts behind the Sunda arc. Terra Cognita 7, p. 398. *(Abstract only?)*

Droge, Philip (2015)- De schaduw van Tambora. De grootste natuurramp sinds mensenheugenis. Spectrum, Houten, p. 1-287.
('The shadow of Tambora. The greatest natural disaster in human memory'. Review of the severe impacts of the April 1815 eruption of Tambora on Sumbawa in 1815 on humans across the world ('the year without a summer'))

Dvorak, J.J., H. Said, R.D. Hadisantono, N. Rahardja, D. Mulyadi, D. Reksowirogo & K. Restikadjaja (1987)- Geodetic measurements at Indonesian volcanoes. U.S. Geological Survey (USGS) Report OF 87-0130, p. 1-40.
(online at: http://pubs.usgs.gov/of/1987/0130/report.pdf)

Edwards, C.M.H. (1990)- Petrogenesis of tholeiitic, calc-alkaline and alkaline volcanic rocks, Sunda Arc, Indonesia. Ph.D. Thesis, Royal Holloway and Bedford New College, University of London, p. 1-373.
(Unpublished) (Incl. volcanic rock chemistry of Gunung Guntur, Ringgit-Besar, Muriah, Flores, etc.)

Edwards, C.M.H., J.D. Morris, M.F. Thirlwall (1993)- Separating slab from mantle signatures in arc lavas using B/Be and radiogenic isotope systematics. Nature 362, 6420, p. 530-533.
(Combining B/Be with Sr, Nd and Pb isotopes of alkaline, calk-alkaline and tholeiitic lavas of young volcanoes from Java (Guntur, Ringgit) and Flores (Kelimutu, Lewitobi, Mandiri). High B/Be and 10Be/9Be ratios in tholeiitic and calk-alkaline lavas are partial melts of mantle produced by fluxing by fluids from subducted slabs. Alkaline lavas always low B/Be and derived from mantle not modified by recent subduction)

Ehrat, H. (1929)- Die tatigen Vulkane des Gunung Api (Sangean) bei Bima, Niederl. Indien. Zeitschrift fur Vulkanologie 12, 1, p. 8-14.
('The active volcanoes of the Gunung Api (Sangean) near Bima, Netherlands Indies'. Gunung Sangeang Api complex volcanic island in Lesser Sunda Islands, 8 km off NE coast of Sumbawa. (Not same as Gunung Api in Banda Sea). Description by geologist Ehrat of ~1950m high, highly active volcanic centers on Sangeang island (also visited by Verbeek (1908) and Elbert (1912)). Two main craters (Solia, Branno), each ~1500m in diameter, and 8 smaller eruption points. Last lava flow in 1911 Andesitic and olivine-basalt lavas, with common inclusions of diorite and granodiorite (recent significant recent eruptions in 2012m 2014; JTvG))

Ehrenberg, C.G. (1855)- Nahere Bestimmung der Mischung des frischen Auswurfs des Schlammvulkans von Poerwodadi auf Java. Bericht Bekanntmachung koniglichen Preussische Akademie Wissenschaften Berlin, p. 570-576.
(online at: www.biodiversitylibrary.org/item/41576#page/584/mode/1up)
('Determination of the mixture of fresh eruptive products of the mud volcano of Purwodadi on Java'. Muds with mix of marine and non-marine foraminifera and diatoms)

Elburg, M., J.D. Foden, M.J. van Bergen & I. Zulkarnain (2004)- Along- and across-arc geochemical constraints on sources and transfer processes in the Sunda-Banda Arc, Indonesia. 4p.
(online at: www.geophysics.rice.edu/sota/papers)

Elburg, M.A., J.D. Foden, M.J. van Bergen & I. Zulkarnain (2005)- Australia and Indonesia in collision: geochemical sources of magmatism. J. Volcanology Geothermal Research 140, p. 25-47.
(Alor, Lirang, Wetar and Romang in extinct section of Sunda-Banda arc, where collision with Australia brought subduction to halt. Pb isotopes reflect mixing from subducting Australian crust)

Elburg, M.A. & V.S. Kamenetsky (2008)- Limited influence of subducted continental material on mineralogy and elemental geochemistry of primitive magmas from Indonesia-Australia collision zone. Lithos 105, p. 73-84.
(online at: www.academia.edu/3247319/Limited_influence_of_subducted_continental_material_on_mi Etc.)
(Two basalt-andesite samples from Alor Island. Sr, Nd and Pb isotope data show influence of subducted continental material, but major and trace element compositions not very different from typical subduction-related magmas)

Escher, B.G. (1919)- Programma van werkzaamheden voor een te stichten afdeeling/commissie voor Vulkanologie van de Koninklijke Natuurkundige Vereeniging. Natuurkundig Tijdschrift voor Nederlandsch-Indie 78, p. 99-118.
('Work program for a proposed department/ committee for Volcanology of the Koninklijke Natuurkundige Vereeniging (Royal Natural Science Society)'. BPM geologist and future geology professor in Leiden Berend G. Escher arguing for the creation of new organization for volcano studies and co-ordination of hazard risks. This resulted in creation of the Volcanology Department within the Dienst van het Mijnwezen in 1920)

Escher, B.G. (1931)- Gloedwolken en lahar's, Vulkanische catastrophes in Nederlandsch-Indie. Tropisch Nederland 3, 19, p. 291-320.
(online at: https://resolver.kb.nl/resolve?urn=MMKB26:001268021:pdf)
('Incandescent clouds and lahars'. Part 1 of popular review of volcanic catastrophes and volcano monitoring, with examples mainly from Indonesia: Types of volcanism and volcanic catastrophes)

Escher, B.G. (1931)- Gloedwolken en lahar's, Vulkanische catastrophes in Nederlandsch-Indie, II. Slot. Tropisch Nederland 3, 20, p. 307-320.
(online at: https://resolver.kb.nl/resolve?urn=MMKB26:001268022:pdf)
('Incandescent clouds and lahars'. Part 2 of popular review of volcanic catastrophes and volcano monitoring, with examples mainly from Indonesia)

Escher, B.G. (1935)- Het vulkanisme in Ned. Indië en zijn oorzaak. Natuurkundige Voordrachten, Nieuwe Reeks 13, Maatschappij Diligentia, Van Stockum, The Hague, p. 103-112.
(online at: https://natuurwetenschappen-diligentia.nl/wp-content/uploads/2020/02/Diligentia_jaarboek_13.pdf)
(The volcanism in the Netherlands Indies and its cause'. Summary of a lecture at the Royal Society for Natural Sciences 'Diligentia' in The Hague. One of first papers attempting to link volcanic arcs in Indonesia to paralel belts of negative gravity anomalies ('axis of Vening Meinesz'))

Escher, B.G. (1937)- Rapport sur les phenomenes volcanologiques dans l' Archipel Indien pendant les annees 1933, 1934 et 1935 et sur les ouvrages de volcanologique publies durant ces annees, concernant les volcans des Indes Neerlandaises. Bulletin of Volcanology (Bulletin Volcanologique) 1937, 1, p. 127-177.
('Report on the volcanological phenomena in the Netherlands Indies Archipelago in the years 1933, 1934 and 1935, and on works on volcanology published on volcanoes of the Netherlands Indies')

Escher, B.G. (1940)- Het probleem der caldeira's en der Maancircussen. Geologie en Mijnbouw 2, 6, p. 133-143.
(online at: https://resolver.kb.nl/resolve?urn=MMSHCL02:017136006:pdf)
('The problem of the calderas and the moon craters'. Discussion of origin of volcanic calderas, following earlier discussions on the subject by Akkersdijk (1928), Van Bemmelen (1929) and Wing Easton (1930), and

mainly based on Indonesia examples. Viewed as post-eruption collapse structures. Moon craters about 10 times larger than Earth calderas and probably not of volcanic origin)

Foden, J.D. (1979)- The petrology of some young volcanic rocks from Lombok and the Lesser Sunda islands. Ph.D. Thesis University of Tasmania, Hobart, p. 1-306.
(online at: http://eprints.utas.edu.au/17675/1/Foden_Thesis.pdf)
(Study of 5 modern volcanoes in E Sunda arc: Rindjani (Lombok) and G. Sangenges, Tambora, Soromundi and Sangeang Api (Sumbawa) island. All occur 165-190 km above active, N dipping Benioff Zone. Volcanoes of this sector of arc erupted diverse range of lavas, ranging from ankaramite-high-Al basalt-andesite-dacite suite of Rindjani, through moderately potassic ne-trachybasalt- trachyandesite suites from Tambora and Sangeang Api, to highly undersaturated, leucite-bearing types from G. Sangenges and Soromundi. The K20-content of these suites shows no correlation with depth to Benioff Zone)

Foden, J.D. (1983)- The petrology of the calcalkaline lavas of Rindjani Volcano, East Sunda Arc: a model for island arc petrogenesis. Journal of Petrology 24, 1, p. 98-130.
(Rindjani large, active compound strato-volcano on Lombok, in W part of E Sunda Arc. Pleistocene-Recent calcalkaline suite composed of diverse lavas, including ankaramite, high-Al basalt, andesite, high-K andesite and dacite. Sr-isotopic and geochemical constraints suggest derivation from sub-arc mantle)

Foden, J.D. (1986)- The petrology of Tambora volcano, Indonesia: a model for the 1815 eruption. J. Volcanology Geothermal Research 27, p. 1-41.
(online at: www.researchgate.net/publication/223441162_The_petrology_of_Tambora_volcano_Indonesia_A_model_for_the_1815_eruption)
(Lavas of Tambora volcano on Sumbawa of unusual, moderately undersaturated, K_2O-rich types, ranging from ne-trachybasalt to ne-trachyandesite. Products of 1815 eruption black, glassy, biotite-bearing, ne-trachyandesites with scoria, pumice and tuff of same composition. 1815 eruption followed long period of inactivity)

Foden, J.D. & R. Varne (1980)- The petrology and tectonic setting of the Quaternary- Recent volcanic centers of Lombok and Sumbawa. Chemical Geology 30, p. 201-226.
(online at: https://www.academia.edu/58486973/The_petrology_and_tectonic_setting_of_Quaternary_Recent_volcanic_centres_of_Lombok_and_Sumbawa_Sunda_arc)
(Bali-Lombok-Sumbawa sector of Sunda arc flanked in N and S by oceanic crust. Oldest rocks from Lombok and Sumbawa islands Lower Miocene- Pliocene sediments and volcanics beneath Quaternary volcanic centers. Three large active volcanoesin N parts of Lombok (Rindjani; basalt-andesite-dacite) and Sumbawa (Tambora and Sangeang Api; trachybasalt-trachyandesite), all ~150-190 km above N-dipping Benioff zone. Extinct Quaternary centers S of active volcanoes on Sumbawa (Soromundi, Sangenges). Volcanic composition-space-time relations in Lombok-Sumbawa sector not in accordance with general island-arc schemes)

Foden, J.D. & R. Varne (1981)- The geochemistry and petrology of the basalt-andesite-dacite suite from Rinjani volcano, Lombok: implications for the petrogenesis of island arc, calcalkaline magmas. In: A.J. Barber & S. Wiryosujono (eds.) The geology and tectonics of Eastern Indonesia, Proc. CCOP-IOC SEATAR Working Group Meeting, Bandung 1979, Geological Research Development Centre (GRDC), Bandung, Special Publ. 2, Bandung, p. 115-134.
(Rinjani lavas compositionall diverse, from ankaramites and high-Al basalts to andesites and dacites, representing typical calkalkaline association erupted by many Circum-Pacific volcanoes)

Foden, J.D. & R. Varne (1981)- Petrogenetic and tectonic implications of near coeval calk-alkaline volcanism on Lombok and Sumbawa islands in the eastern Sunda Arc. In: A.J. Barber & S. Wiryosujono (eds.) The geology and tectonics of Eastern Indonesia, Proc. CCOP-IOC SEATAR Working Group Meeting, Bandung 1979, Geological Research Development Centre (GRDC), Bandung, Special Publ. 2, Bandung, p. 135-152.
(Quaternary volcanoes of Lombok- Sumbawa sector of E Sunda Arc occur 165-190km above N-dipping Benioff zone. Diverse range of lavas. No correlation between K2) content and depth to Benioff zone. Between-volcano variations reflect mantle source heterogeneity)

Fontijn, K., F. Costa, I. Sutawidjaja, C.G. Newhall & J.S. Herrin (2015)- A 5000-year record of multiple highly explosive mafic eruptions from Gunung Agung (Bali, Indonesia); implications for eruption frequency and volcanic hazards. Bulletin of Volcanology 77, 59, p. 1-15.
(Mt. Agung has an average eruptive frequency of one VEI ≥2–3 eruptions per century)

Gao, M.H. & P.P. Liu (2023)- Mixing and eruption of mafic magmas of the Sipisupisu volcano, the Toba volcanic system, Indonesia. Contributions to Mineralogy and Petrology 178, 65, p.
(Sipisupisu volcano stratocone on NW tip of Toba Caldera produced two super-eruptions in Quaternary. Mineralogy of basalts and basaltic andesites indicates open-system processes with multiple episodes of magma recharge and mixing. Melts ascended from large basaltic magma reservoir at Moho and resided in at least three staging magma reservoirs within crust. Etc.)

Gardner, J.E., P.W. Layer & M.J. Rutherford (2001)- Phenocrysts versus xenocrysts in the youngest Toba Tuff: implications for the petrogenesis of 2800 km^3 of magma. Geology (GSA) 30, 4, p. 347-350.
(40Ar/39Ar dating of biotite, sanidine, hornblende, and plagioclase from youngest Toba Tuff of 75 ka suggests hornblende and some plagioclase are xenocrysts and came from at least 1.5 Ma old source)

Gasparon, M., D.R. Hilton & R. Varne (1994)- Crustal contamination processes traced by helium isotopes: examples from the Sunda arc, Indonesia. Earth Planetary Science Letters 126, p. 15-22.
(Helium He-3/He-4 isotope data from olivine and clinopyroxene from 13 volcanic centers between C Sumatra and Sumbawa in Sunda arc indicate crustal contamination unrelated to subduction in Sunda arc)

Gasparon, M. & R. Varne (1998)- Crustal assimilation versus subducted sediment input in west Sunda arc volcanics: an evaluation. Mineralogy and Petrology 64, p. 89-117.
(Geochemical analyses of Quaternary-Cretaceous sediments from NE Indian Ocean used to estimate composition of sedimentary material subducted along Sunda Trench. Post-Miocene siliceous clastic sediments near Sunda arc largely derived from arc itself, largely accreted and not subducted. The least contaminated arc volcanics in W section of W Sunda arc, where sediment flux highest. Assimilation of crustal material by uprising melts from Indian Ocean-type mantle wedge better accounts for isotope changes of arc volcanics, and ties to variations in crustal thickness and composition along arc)

Gatti, E. (2012)- Geochemical and sedimentological investigations of Youngest Toba Tuff ashfall deposits. Ph.D. Thesis University of Cambridge, p. 1-181. *(Unpublished)*
(online at: https://www.repository.cam.ac.uk/handle/1810/244398)
(Study of Youngest Toba Tuff (YTT), a rhyolitic co-ignimbrite ashfall from ~73 ka 'super-eruption' of Toba caldera in Sumatra, the largest known eruption of Quaternary time. In proximal (Lake Toba) and more distal (Malaysia, India) settings)

Gatti, E & C.Oppenheimer (2012)- The utilization of distal tephra records for understanding climatic and environmental consequences of extreme eruptions: a case study from the Youngest Toba Tuff. In: L. Giosan et al. (eds.) Climates, landscapes, and civilizations, American Geophysical Union (AGU) Geophysical Monograph Series 198, p. 63-73.
(online at: www.researchgate.net/publication/264672488_Utilization_of_Distal_Tephra_Records_for Etc.)

Gatti, E., I.M. Villa, H. Achyuthan, P.L. Gibbard & C. Oppenheimer (2014)- Geochemical variability in distal and proximal glass from the Youngest Toba Tuff eruption. Bulletin of Volcanology 76, 9, 859, p. 1-16.
(online at: https://boris.unibe.ch/58640/1/Villa_Gatti.pdf)
(Youngest Toba Tuff eruption, dated to ~74 ka, produced est. 800 km^3 dense rock equivalent of co-ignimbrite fallout and may largest volcanic eruption of last 2 Ma. Chemical composition of YTT ash variable, as result of internal processes during magma formation and partly related to depositional environment)

Geiger, H., V.R. Troll, E.M. Jolis, F.M. Deegan, C. Harris, D.R. Hilton & C. Freda (2018)- Multi-level magma plumbing at Agung and Batur volcanoes increases risk of hazardous eruptions. Nature Scientific Reports 8, 10547, p. 1-14.
(online at: www.nature.com/articles/s41598-018-28125-2.pdf)
(Bali active stratovolcanoes Agung and Batur magma storage at crust-mantle boundary, also plagioclase crystallisation in upper crustal storage reservoirs.Multi-level plumbing architecture could drive replenishing magma to rapid volatile saturation, thus increasing likelihood of explosive eruptions)

Gertisser, R. & S. Self (2015)- The great 1815 eruption of Tambora and future risks from large-scale volcanism. Geology Today 31, 4, p. 132-136.

Gertisser, R., S. Self, L.E. Thomas, H.K. Handley, P. van Calsteren & J.A. Wolff (2012)- Processes and timescales of magma genesis and differentiation leading to the Great Tambora Eruption in 1815. Journal of Petrology 53, 2, p. 271-297.
(online at: https://academic.oup.com/petrology/article/53/2/271/1534863)
(Eruption of Tambora volcano (Sumbawa) in 1815 one of largest explosive eruptions in historical time. Extensive pyroclastic deposits from emptying of 30-33 km^3 trachyandesite magma body. Parental trachybasalt magma can be produced by ~2% partial melting of garnet-free, Indian-type mid-ocean ridge basalt-like mantle source contaminated with ~3% fluids from altered oceanic crust and <1% sediment. Differentiation from primary trachybasalt to trachyandesite in two-stage polybaric differentiation)

Gill, J.B. & R.W. Williams (1990)- Th isotope and U-series studies of subduction-related volcanic rocks. Geochimica Cosmochimica Acta 54, 5, p. 1427-1442.
(On U, Th, Po, Ra isotopes in volcanic arc rocks, incl. data from Sunda, Banda and Sangihe Arcs, Indonesia)

Godang, S., B. Priadi, Fadlin, T. van Leeuwen & A. Idrus (2021)- Geochemistry study of cross-castic magma alkalinity evolution. Indonesian J. on Geoscience (IJOG) 8, 2, p. 177-196.
(online at: https://ijog.geologi.esdm.go.id/index.php/IJOG/article/view/635)
(With example of Salak volcanics (W Jawa) showing magma evolution from Mg-series to Fe-series)

Gogarten, E. (1917)- Der Vulkan 'Tolo' auf Halmahera (Molukken). Petermann's Mitteilungen, Gotha, 63, p. 242-246 and p. 273-277.
(online at: https://zs.thulb.uni-jena.de/receive/jportal_jpvolume_00154185)
(Mainly geographic discussion by Swiss geologist/bergingenieur Emil Gogarten. Little known Tolo volcano commonly confused with other Moluccas volcanoes in historic documents, and often wrongly located on Morotai Island. Wichmann (1897) reported on a recent eruption. Locals call it Duko or DukoMa Tala (now called Dukono))

Gogarten, E. (1918)- Die Vulkane der nordlichen Molukken. Zeitschrift fur Vulkanologie 4, 4, p. 211-305.
(online at: google books, but without maps)
('The volcanoes of the northern Moluccas'. Brief descriptions and earlier visits and eruption histories volcanoes and some geology of Halmahera and Ternate, based on 1911 field work by Swiss mining engineer-geologist Emil Gogarten)

Guillet, S., C. Corona, M. Stoffel, M. Khodri, F. Lavigne, P. Ortega, N. Eckert, P.D. Sielenou, V. Daux et al. (2017)- Climate response to the Samalas volcanic eruption in 1257 revealed by proxy records. Nature Geoscience 10, p. 123-128.
(manuscript online at: https://hal.science/hal-01497225v1/file/Guillet_et_al_1257_1258_Nature_Geoscience_Format_Final.pdf
(Eruption of Samalas (= Old Rinjani) volcano on Lombok in 1257 with sulfur in ice cores twice volume of 1815 Tambora eruption. >40 km^3 of dense magma expelled; eruption column up to 43 km altitude. Years 1258 and 1259 some of coldest N Hemisphere summers of past millennium. Eruption aggravated existing famine crises)

Gunawan, H., Surono, A. Budianto, Kristianto, O. Prambada, W. McCausland, J. Pallister & M. Iguchi (2019)- Overview of the eruptions of Sinabung eruption, 2010 and 2013- Present and details of the 2013 phreatomagmatic phase. J. Volcanology Geothermal Research 382, p. 103-119.
(online at: www.sciencedirect.com/journal/journal-of-volcanology-and-geothermal-research/vol/382/suppl/C)
(Small phreatic eruption of Sinabung Volcano, N Sumatra, in August 2010 marked first eruption in last ~1200 years. New eruption began on 15 September 2013 and continues to present. Ongoing eruption 5 major phases)

Gunawan, R.M.P.P. & I. Suhendro (2023)- Chemical and textural studies of the youngest pyroclastic deposits at Mt. Seminung (South Sumatra, Indonesia): a window for understanding the explosive behavior of a post-caldera volcano. Rudarsko-Geolosko-Naftni Zbornik, Zagreb 38, 5, p. 61-77.
(online at: https://hrcak.srce.hr/en/file/448542)
(Study of youngest tephra deposits of Seminung Volcano (post-eruptive volcano of Ranau Caldera) in South Sumatra. Explosive event of unidentified age) deposited ~3.7m thick sequence of pumice- and scoria-bearing pyroclastic deposits at ~3.8 km NE from vent)

Hadikusumo, D. (1961)- Report on the volcanological research and volcanic activity in Indonesia for the period 1950-1957. Bull. Volcanological Survey of Indonesia, Bandung, 100, p. 1-122.

Hadikusumo, D. (1961)- On the classification of dangerous volcanoes in Indonesia: Indonesia Madjelis Ilmu Penget 2, p. 177-182.

Halldorsson, S.A., D.R. Hilton, V.R. Troll & T.P. Fischer (2013)- Resolving volatile sources along the western Sunda arc, Indonesia. Chemical Geology 339, p. 263-282.
(online at: https://www.vrtroll.com/onewebmedia/Halldarsson%20et%20al%202013.pdf)
(Chemical and isotope (He-C-N) data of fumaroles and hydrothermal fluids from 19 volcanic centers along W Sunda arc suggest subducting slab is principal provider of volatiles. Increased contribution of CO_2 in N Sumatra suggest subducted sediment (particularly Nicobar Fan Himalayan-derived sediment) strong control on magmatic CO_2 characteristics, suggesting significant part must enter trench)

Harington, C.R. (ed.) (1992)- The year without a summer? World climate in 1816. Canadian Museum of Nature, Ottawa, p, 1-576.
(online at: https://ia600203.us.archive.org/18/items/yearwithoutsumme1992hari/yearwithoutsumme1992hari.pdf)
(Series of papers describing the 1815 Tambora eruption on Sumbawa, the largest known volcanic eruption in human history and its global impact. The unusual, cool summer of 1816 that followed is commonly attributed to increase in atmospheric turbidity that followed the eruption of Mt Tambora (Stommel and Stommel 1979))

Hariyono, E. & Liliasari S (2018)- The characteristics of volcanic eruption in Indonesia. In: G. Aiello (Ed.) Volcanoes- geological and geophysical setting, Theoretical aspects and numerical modeling, Applications to industry and their impact on the human health, Intechopen, Chapter 5, p. 73-92.
(online at: https://scispace.com/pdf/the-characteristics-of-volcanic-eruption-in-indonesia-3hziuwdjud.pdf)
(General review. Indonesia has 147 volcanoes, 76 of them are active. Etc.)

Hartmann, M. (1935)- De werkende vulkanen van het eiland Lomblen (Solor Archipel). Tijdschrift Koninklijk Nederlands Aardrijkskundig Genootschap (2), 52, p. 817-836.
(online at: http://resolver.kb.nl/resolve?urn=MMUBA13:001683001:pdf)
('The active volcanoes of Lomblen Island (Solor Archipelago)'. Lomblen in Banda volcanic arc, E of Flores, surveyed while employed by Dienst van den Mijnbouw in late 1931. Lomblen island SW-NE trending volcanic mountain chain with 3 active (Lewotolo, Labalekan, Ili Weroeng) and 2 recently active (Kedang, Mingar) volcanoes. All Lomblen volcanoes characterized by ~SE-NW trending faults)

Hartmann, M. (1935)- Der Vulkan Batoe Tara. Zeitschrift fur Vulkanologie 16, p. 180-191.

('The Batu Tara volcano'. Uninhabited active volcano, ~743m high, in Banda (Flores) Sea, NE of Flores, 50km N of Lembata (Lomblen) island (described by Verbeek (1908) as Poeloe Kambing 2). Known for its potassic leucite-bearing basanitic and tephritic rocks (see also Stolz et al. 1988, Van Bergen et al. 1992, etc.))

Hartmann, M. (1936)- Der tatige Feuerberg Siroeng auf Pantar. Natuurkundig Tijdschrift voor Nederlandsch-Indie 96, p. 89-121.
(online at: https://resolver.kb.nl/resolve?urn=MMTEY01:179532002:pdf)
('The active fire mountain (volcano) Sirung on Pantar'. Sirung mountains along S coast of Pantar island (Banda Arc between Lomblen and Alor) surveyed by author on behalf of government in November 1931. With multiple little-known, sulphurous active craters at Siroeng. Possible eruption 1852, 1934, etc.))

Hartono, U. (2000)- Island arc magmatism: a general review on petrogenetic models. Jurnal Geologi dan Sumberdaya Mineral (JGSM) 10, 110, p. 16-23.
(General discussion of genesis of island arc magmas. Three potential sources, mantle wedge above subducting slab, subducted slab of oceanic crust and possibly sediments and arc crust)

Hartono, U. (ed.) (2001)- Ofiolit di Sulawesi, Halmahera dan Kalimantan: genesa, alih tempat dan mineral ekonomi. Badan Penelitian dan Pengembangan Energi dan Sumber Daya Mineral, Special Publ. 28, p. 1-88.
('Ophiolites in Sulawesi, Halmahera and Kalimantan: genesis, displacement and economic minerals')

Hartono, U. (2009)- Contribution of arc magmatism studies in early stage mineral exploration. Jurnal Sumber Daya Geologi (JSDG) 19, 5, p. 287-296.
(online at: https://jgsm.geologi.esdm.go.id/index.php/JGSM/article/view/213/203)
(Indonesia has 15 or more volcanic arcs with total length of ~9000 km. Eight arcs contain known mineral deposits, while rest may be prospective. Mainly general discussion on arc magmatism and mineral deposits No correlation between porphyry-Cu or epithermal mineralizations and single petrological/ geological factor)

Hartono, U. & R.I.H. Sulistyawan (2011)- An overview of arc magma petrogenesis. Jurnal Sumber Daya Geologi (JSDG) 21, 4, p. 179-190.
(online at: https://jgsm.geologi.esdm.go.id/index.php/JGSM/article/view/145/141)
(Review of subduction-related magmas. Most arc magmas derived from melting of upper mantle induced by released fluids and incompatible elements from subducted oceanic crust. Crustal-derived magmas, from melting of either subducted slab or lower crust, also present in some arcs)

Hartono, U. & R.I.H. Sulistyawan (eds.) (2011)- Indonesian arc magmatism: petrology, tectonics, and mineralization. Geological Agency, Bandung, Special Publ., p. 1-278.

Hasibuan, R.F. (2020)- The evolution of magma plumbing system in Tangkil and Rajabasa volcanoes, Indonesia. Ph.D. Thesis, Department of Geoscience, Akita University, Japan, p. 1-112.
(online at: https://air.repo.nii.ac.jp/)

Hasibuan, R.F., T. Ohba, M. Abdurrachman & T. Hoshide (2017)- Magmas characteristics of Rajabasa volcanic complex inferred by petrological approach. Proc. Joint Convention HAGI-IAGI-IAFMI-IATMI (JCM 2017), Malang, p. 1-5. *(online at: https://www.iagi.or.id/web/digital/5/2017_IAGI_Malang_Magmas-Characteristics-of-Rajabasa-Volcanic.pdf)*
(Rajabasa dormant Quaternary volcano at S tip of Sumatra. Volcanics mainly basaltic andesite, with K-Ar ages of volcanics 0.31-0.12 Ma (Pleistocene). Older volcanics SE of Rajabasa at nearby Tangkil (4.33 Ma; Pliocene). Two distinct type of magmas in Tangkil, calc-alkaline dacite and tholeiitic basalt)

Hasibuan, R.F., T. Ohba, M. Abdurrachman & T. Hoshide (2020)- Temporal variations of petrological characteristics of Tangkil and Rajabasa volcanic rocks, Indonesia. Indonesian J. on Geoscience (IJOG) 7, 2, p. 135-159.
(online at: https://ijog.geologi.esdm.go.id/index.php/IJOG/article/view/651)

(Petrography and chemistry of Pliocene and Pleistocene lavas from Tangkil and Rajabasa volcanoes at SE tip of Sumatra, with basaltic and felsic end-members. Volcanism at Tangkil started earlier (~4.3 Ma) than Rajabasa (0.3- 0.1 Ma))

Haslam, M. (2013)- Climate effects of the 74 ka Toba super-eruption: multiple interpretive errors in 'A high-precision 40Ar/39Ar age for the Young Toba Tuff and dating of ultra-distal tephra' by D. Mark, et al. Quaternary Geochronology 18, p. 173-175.
(Critique of Mark et al. 2013 paper)

Hatherton, T. & W.R. Dickinson (1969)- The relationship between andesitic volcanism and seismicity in Indonesia, the Lesser Antilles, and other island arcs. J. of Geophysical Research 74, p. 5301-5310.
(Early paper documenting increase in K-content with depth to seismic Benioff zone)

Heim, A. (1930)- Beobachtungen auf dem Merapi Sumatras im August 1928. Zeitschrift fur Vulkanologie 12, p. 322-326.
('Observations on the Merapi volcano in Sumatra in August 1928'. Brief report of (low) activity of Merapi volcano with multiple craters in the Padang Highlands around an August 1928 visit)

Heyckendorf, K. & D. Jung (1992)- Tambora volcano, Sumbawa Island, Indonesia; a comparison of ancient and modern volcanic products. Mitteilungen Geologisch-Palaontologisch Institut, Universitat Hamburg 73, p. 1-35.

Hidayat, A., M.A. Marfai & D.S. Hadmoko (2020)- Eruption hazard and challenges of volcanic crisis management on a small island: a case study on Ternate Island -Indonesia. Int. J. of GEOMATE (Japan) 18, 66, p. 171-178.
(online at: https://geomatejournal.com/geomate/article/view/462/1280)
(Ternate Island, W of Halmahera, is volcanic island formed by products of active Gamalama volcano. Altitude 1715m. Well-recorded history of 15 eruptions since 16th century. Rel. densely populated and vulnerable to volcanic hazards)

Hidayat, A., M.A. Marfai & D.S. Hadmoko (2020)- Eruption on Indonesia's volcanic islands: a review of potential hazards, fatalities, and management. Proc. 2nd Int. Conference Environmental Geography and Geography Education (ICEGE), East Java 2019, IOP Conference Series: Earth and Environmental Science 485, 012061, p. 1-11.
(online at: https://iopscience.iop.org/article/10.1088/1755-1315/485/1/012061/pdf)
(Brief review of Indonesia's 22 volcanic islands with records of eruptions during Holocene (not including volcanpes on Sumatra, Java, Bali, Lombok, etc.; JTvG))

Hidayati, S. & C. Sulaeman (2013)- Magma supply system at Batur Volcano inferred from volcano-tectonic earthquakes and their focal mechanism. Indonesian J. on Geoscience (IJOG) 8, 2, p. 97-105.
(online at: http://ijog.bgl.esdm.go.id/index.php/IJOG/article/view/159/159)
(Volcano-tectonic earthquakes in September- November 2009 show epicenters aligning in NE- SW direction, coinciding with weak zone of Batur Volcano Complex, Bali. Focal zone depths ~1.5- 5.5 km beneath summit)

Hilton, D.R. & H. Craig (1989)- A Helium isotope transect along the Indonesian archipelago. Nature 342, 6252, p. 906-908.
(Banda arc 3He/4He ratios significantly lower than normal in mid-ocean-ridge basalts (MORB). 80% of radiogenic Helium is from subducting continental material. Measurements along Sunda arc show MORB-like ratios from W Java to sharp transition zone at Lomblen Island (N/NW of Timor), where low ratios of Banda arc begin)

Hilton, D.R., J.A. Hoogewerff, M.J. van Bergen & K. Hammerschmidt (1992)- Mapping magma sources in the east Sunda-Banda arcs, Indonesia: constraints from Helium isotopes. Geochimica Cosmochimica Acta 56, p. 851-859.

(He isotope analyses from 11 volcanoes from Flores (E Sunda arc) through inactive segment between arcs to Banda Island. Results consistent with involvement of crustal material in magma genesis throughout E Sunda/ Banda arcs, as far W as Iya in C Flores. Source of He in crustal component unlikely to be terrigenous sediments derived from Australian continent; rather, degassing of Australian continental crust)

Hoogewerff, J.A. (1999)- Magma genesis and slab-wedge interaction across an island-arc collision zone, East Sunda Arc, Indonesia. Geologica Ultraiectina 178, p. 1-199. (*Ph.D. Thesis University of Utrecht*)
(online at: http://dspace.library.uu.nl/handle/1874/272287)
(Study of Sr, Nd, Pb, Ra, Th and U isotopes and major and trace elements from five active and >10 inactive volcanic centers in Adonara-Lomblen-Pantar Sector of E Sunda Arc (E of Flores and W of volcanically inactive Alor-Wetar sector). Both mantle components (depleted Indian Ocean mantle) and subduction-related components (subducted continental material, which changes in composition from E to W (Indian Ocean pelagic sediment and detrital Australian shelf sediment?, and crystalline Australian continental crust) contribute to magma generation. Active Adonara-Pantar Sector volcanoes display strongest sedimentary or even 'continental' signal of Sunda-Banda Arcs volcanoes. Volcanic activity in Alor-Wetar sector started at least 12 Ma ago as intra-oceanic are, and ceased about 3 Ma ago)

Hoogewerff, J.A., M.J. van Bergen, P.Z. Vroon, J. Hertogen, R. Wortel et al. (1997)- U-series, Sr-Nd-Pb isotope and trace-element systematics across an active island arc-continent collision zone: implications for element transfer at the slab-wedge interface. Geochimica Cosmochimica Acta 61, 5, p. 1057-1072.
(Isotopic and trace element data consistent with three-component mixing whereby slab-derived hydrous fluid and siliceous melt both added to sub-arc mantle source. Hydrous fluid largely controls input in shallow part of subduction zone, siliceous melt dominates flux at deeper levels. Sedimentary material primary source of both)

Hoppe, H. (1903)- Uber Andesite der Vulkane Sago, Merapi, Manindjau und Kaba auf Sumatra. Inaugural Dissertation Koningliche Universitat Breslau (now Wroclaw University, Poland), p. 1-63.
(online at: https://bibliotekacyfrowa.pl/en/dlibra/publication/106315/edition/107931/uber-andesite-der-vulkane-sago-merapi-manindjau-und-kaba-auf-sumatra-hoppe-hugo-1880)
('About andesites of the volcanoes Sago, Merapi, Manindjau and Kaba on Sumatra'. Descriptions and chemical analyses of pyroxene andesites and hornblende-pyroxene andesites from four active volcanoes in W Sumatra, collected in 1900, by W. Volz))

Hutchison, C.S. (1975)- Correlation of Indonesian active volcano geochemistry with Benioff zone depth. Geologie en Mijnbouw 54, 3-4, p. 157-168.
(online at: https://drive.google.com/file/d/0B7j8bPm9Cse0ak95aEQ5THJ5TWc/view)
(Indonesian arc >6000 km long from N Sumatra to the Molucca Sea. Majority of products augite-hypersthene andesite or basalt. Leucite in volcanoes over deepest seismic contours. Overall increase in K and alkali % with Benioff zone depth, but rather high variability)

Hutchison, C.S. (1976)- Indonesian active volcanic arc: K, Sr, and Rb variation with depth to the Benioff zone. Geology (GSA) 4, p. 407-408.
(K, Sr, and Rb vary with depth to Benioff zone. K2O increase most useful for Benioff zone depth prediction)

Hutchison, C.S. (1977)- Banda Sea volcanic arc: some comments on the Rb, Sr and cordierite contents. Warta Geologi (Newsletter Geological Society Malaysia) 3, 2, p. 27-35.
(online at: https://gsmpubl.files.wordpress.com/2014/09/ngsm1977002.pdf)
(Unusually high Rb/Sr ratios in volcanic rocks and cordierite in rhyolite at Tanjong Illipoi (Wetar) indicate of strong continental crustal influence in source of volcanic rocks. Romang also higher Rb/Sr ratios than active volcanic arc. Wetar very different from other islands of Banda Arc because of abundant light grey rhyolite and dacite. This extinct, eroded and uplifted portion of Banda volcanic arc N of Timor affected by subducted Australian continental Plate. Presence of cordierite in Ambon volcanics also imply involvement of continental crustal basement in N part of Banda Arc)

Hutchison, C.S. (1981)- Review of the Indonesian volcanic arc. In: A.J. Barber & S. Wiryosujono (eds.) The geology and tectonics of Eastern Indonesia. Proc. CCOP-IOC SEATAR Working Group Meeting, Bandung 1979, Geological Research Development Centre (GRDC), Bandung, Special Publ. 2, p. 65-80.
(Indonesian volcanic arc extends for 6000km from N Sumatra to Molucca Sea. Volcanism mainly calk-alkaline-high-K calc-alkaline with minor tholeiite and shoshonite. Lavas predominantly andesitic. Good correlation between depth of underlying Benioff zone of subduced Indian Ocean Plate and K2O content and Sr isotopes, indicating magma is of mantle origin. E-ward increase of 87Sr/86Sr from W Java to Bali suggests transition from continental to oceanic basement. Volcanoes above deep seismic contours are shoshonitic. Extinct arc of W Sulawesi also shoshonitic. Pliocene cordierite dacite-granites very high Sr ratios, consistent with continental origin. And much more; JTvG)

Hutchison, C.S. (1982)- Indonesia. In: R.S. Thorpe (ed.) Andesites. John Wiley, New York, p. 207-224.
(Review of Indonesian volcanic arc, similar to Hutchison (1981))

Iguchi, M., Surono, T. Nishimura, M. Hendrasto, U. Rosadi, T. Ohkura, H. Triastuty, A. Basuki et al. (2012)- Methods for eruption prediction and hazard evaluation at Indonesian volcanoes. J. Disaster Research (Tokyo) 7, 1, p. 26-36.
(online at: https://www.fujipress.jp/jdr/dr/dsstr000700010026/)
(On geophysical observations and geological surveys gathered at four volcanoes in Indonesia (Semeru, Guntur, Kelud and Sinabung), which may be applied in prediction of future eruptions and nature of activity With geological map showing activity stages and deposit types of Mt Sinabung, North Sumatra)

Indrastuti, N., A.D. Nugraha, W.A. McCausland, M. Hendrasto, H. Gunawan, R. Kusnandar et al. (2019)- 3-D seismic tomographic study of Sinabung Volcano, Northern Sumatra, Indonesia, during the inter-eruptive period October 2010-July 2013. J. Volcanology Geothermal Research 382, p. 197-209.
(online at: https://www.sciencedirect.com/science/article/pii/S0377027319301507)

Isnawan, D. & S. Bronto (1997)- Penentuan sumber erupsi batuan gunungapi Tersier dan implikasinya terhadap bahan tambang. Proc. 26th Annual Conv. Indonesian Association Geologists (IAGI), Jakarta, p. 226-236.
(online at: https://www.iagi.or.id/web/digital/64/19.pdf)
('Determination of source of eruption of Tertiary volcanic rocks and their implications for minerals'. Volcano model, with example of evolution of Kulon Progo volcano complex in S Java)

Ipranta & R. Irzon (2019)- Fraksionasi plagioklas pada pembentukan batuan gunungapi Holosen di Kabupaten Halmahera Barat. Jurnal Geologi dan Sumberdaya Mineral (JGSM) 20, 3, p. 165-174.
(online at: https://jgsm.geologi.esdm.go.id/index.php/JGSM/article/view/468)
('Plagioclase fractionation on the Holocene volcanic rocks evolution in West Halmahera Regency'. Study of origin of origin of andesitic volcanic rocks from Jailolo, Sahu, Gamkonora and Ibu volcanoes in W Halmahera)

Ito, H. (2020)- Magmatic history of the Oldest Toba Tuff inferred from zircon U-Pb geochronology. Nature Scientific Reports 10, 17506, p. 1-8.
(online at: https://www.nature.com/articles/s41598-020-74512-z)
(Oldest Toba Tuff (OTT) second largest volume after Youngest Toba Tuff (YTT). Zircon dates from surface and interior sections with ages of 0.84 Ma and 0.97 Ma, respectively. Youngest OTT ages similar to 40Ar/39Ar eruption age of ~ 0.8 Ma. Oldest zircon ages ~ 1.2 Ma, interpreted as protracted crystallization for >400,000 years before eruption. Caldera collapse that generated OTT may be larger than previously interpreted)

Jaxybulatov, K., N.M. Shapiro, I. Koulakov, A. Mordret, M. Landes & C. Sens-Schonfelder (2014)- A large magmatic sill complex beneath the Toba caldera. Science 346, 6209, p. 617-619.
(online at: http://users.clas.ufl.edu/prwaylen/GEO2200%20Readings/Readings/Convergent%20boundaries/Large%20bsill%20beneath%20Toba%20caldera.pdf)
(Size and level of maturity of large volcanic reservoir estimated from radial seismic anisotropy (ambient-noise tomography) below Toba caldera, N Sumatra. Many partially molten sills present in the crust below 7 km)

Jezek, P.A. (1978)- Submarine volcanoes in Banda and Celebes Seas. Berita Direktorat Geologi, Geosurvey Newsletter 10, 20, p. 254-256.

Jezek, P.A. & C. Hutchison (1978)- Banda arc of eastern Indonesia: petrology and geochemistry of the volcanic rocks. Bulletin of Volcanology 41, 4, p. 586-608.
(Banda Arc volcanics major geochemical discontinuity near S end of Weber Deep. Alkali contents and Sr isotope ratios suggest Nila-Teun-Damar volcanic group distinct from Banda-Manuk, and Serua transitional. Lavas generally typical of oceanic island arc, ranging from tholeiitic basalt- dacite on SW Ambon and Banda, low-K calc-alkaline andesites on Manuk-Serua, to high-K calc-alkaline andesites on Nila-Teun-Damar-Gunung Api-Romang. Increasing potassium from Banda to Manuk may be related to increasing Benioff Zone depth. Older cordierite dacites (ambonites) on N Ambon must be derived from continental crust, but younger tholeiitic lavas of SW Ambon and Banda may be related to subduction zone dipping S-wards from Seram)

Johnson, R.W. (ed.) (1976)- Volcanism in Australasia. Elsevier Scientific Publ. Co., Amsterdam, p. 1-422.
(Book with 28 papers on volcanism of Australia, Indonesia, PNG, Soloman Islands, Tonga, to New Zealand)

Jolis, E.M., V.Troll, F. Deegan, L. Blythe, C. Harris et al. (2012)- Tracing crustal contamination along the Java segment of the Sunda Arc, Indonesia. EGU General Assembly 2012, Vienna, p. 9291. *(Abstract only)*
(Arc magmas crustal contamination can take place in mantle source or as magma traverses upper crust. Source contamination generally considered dominant process, but Java segment of Sunda arc shows increase in 87Sr/86Sr and δ18O and decrease in 143Nd/144Nd values from Krakatau towards Merapi. Volcanoes E of Merapi, where upper crust is thinner, show less crustal input)

Justesen, P.Th. (1920)- De Goenoeng Merapi in de Padangse Bovenlanden. Tijdschrift Koninklijk Nederlands Aardrijkskundig Genootschap (2) 37, p. 181-194.
('Mount Merapi in the Padang Highlands', Sumatra)

Kaehlig, C.B., A. Wight & C. Smith (1996)- Volcanoes of Indonesia, creators and destroyers. Times Editions, Singapore, p. 1-144.

Kamenetsky, V.S., M. Elburg, R. Arculus & R. Thomas (2006)- Magmatic origin of low-Ca olivine in subduction-related magmas: co-existence of contrasting magmas. Chemical Geology 233, p. 346-357.
(Comparison of olivines in mafic, high-Ca subduction-related magmas from Indonesia (S Sulawesi), Solomon Islands, Kamchatka and Lau Basin. Two populations: (1) high-Ca; crystallized from melt that dominantly contributed to whole rock composition. (2) low-Ca; generally interpreted as mantle or lithospheric xenocrysts)

Kandlbauer, J., S. Carey & R. Sparks (2013)- The 1815 Tambora ash fall: implications for transport and deposition of distal ash on land and in the deep sea. Bulletin of Volcanology 75, 4, p. 1-11.

Kandlbauer, J. & R.S.J. Sparks (2014)- New estimates of the 1815 Tambora eruption volume. J. Volcanology Geothermal Research 286, p. 93-100.
(Volume estimates of 1815 Tambora eruption, Sumbawa, re-analysed. Total volume ~41 ± 4 km^3 Dense Rock Equivalent (23 ± 3 km^3 ash fall and 18 ± 6 km^3 pyroclastic flows))

Kaneda, Y., I. Suhendro, S. Shibata G.N.R. Bunga Naen, F.T. Aka & T. Hasegawa (2025)- Petrogenetic relationship of pre-caldera and caldera-forming magmas from Maninjau volcano, West Sumatera, Indonesia. Proc. 6th Int. Conference Environmental Resources Management in Global Region (ICERM 2024), Yogyakarta 2024, IOP Conference Series: Earth and Environmental Science 1443, 012008, p. 1-12.
(online at: https://iopscience.iop.org/article/10.1088/1755-1315/1443/1/012008/pdf)
(Dormant Maninjau volcano in W Sumatra is Quaternary andesitic-rhyolitic volcano in Padang Volcanic Field. Caldera-forming eruption of ~52 Ma (VEI 7) produced ~240 km3 of ejecta, forming thick and widespread ignimbrite plateau (especially around Bukttinggi). Eruption also exposed pre-caldera 'somma lava', which are mostly classi fied as medium K andesite-dacite, and unlikely to produce caldera-forming silicic magmas)

Kartadinata, M.N., W. Irawan, A. Solihin & A.R. Mulyana (1998)- Peta geologi Gunungapi Soputan, Sulawesi Utara, 1:50,000. Direktorat Vulkanologi Indonesia, Bandung.
(online at: https://vsi.esdm.go.id/gallery/picture.php?/88/category/9)
('Geologic map of the Soputan Volcano, North Sulawesi'.Soputan is Quaternary volcano complex with 3-4 eruption centers, ~1500- 1809m high. Built on Tondano caldera which formed at ~1.25-2.0 Ma, with eruption of basaltic and basaltic-andesitic volcanics and pyroclastic flows. All built on basement of Miocene volcanics)

Kartadinata, M.N., A.R. Mulyana, E. Kriswati & N. Haerani (2008)- Peta geologi Gunungapi Tambora, Provinsi Nusa Tenggara Barat, 1:50,000. Pusat Vulkanologi dan Mitigasi Bencana Geologi (Center for Volcanology and Geological Hazard Mitigation), Bandung.
(online at: https://vsi.esdm.go.id/gallery/picture.php?/95/category/10)
('Geologic map of Tambora Volcano, Sumbawa, West Nusa Tenggara'. 19 lava flow units since ~190 ka and before major caldera-forming eruption of 1815. Partly overlie older volcanics of Doro Labumbum volcano (~690 ka) in SE, and Late Tertiary limestones that form 'basement' for volcanics on Sanggar Peninsula)

Kartadinata, M.N., D. Wahyudin & R. Taufiqurrahman (2009)- Peta geologi Gunungapi Sibayak, Provinsi Sumatera Utara, 1:50,000. Pusat Vulkanologi dan Mitigasi Bencana Geologi (Center for Volcanology and Geological Hazard Mitigation), Bandung.
(online at: https://vsi.esdm.go.id/gallery/picture.php?/98/category/11)
('Geologic map of the Sibayak volcano, North Sumatra Province'. Volcano SW of Medan, ~2200m high. Active Sibayak center built in 'Singkut caldera'. Multiple lava flow and pyroclastic units)

Kasbani, H. Gunawan, W.A. McCausland, J.S. Pallister, M. Iguchi & S. Nakada (2019)- The eruptions of Sinabung and Kelud Volcanoes, Indonesia. J. Volcanology Geothermal Research 382, p. 1-5.
(Introduction to Special Issue of 20 papers. Review of 2010-2016 activity (after 100s of years of quiescence) of Mt Sinabung in N Sumatra (11 papers) and 2014 eruption of Kelud, E Java (7 papers))

Katili, J. (1987)- Forecasting and mitigation of geological hazard in Indonesia. Proc. WHO/ Indonesia Inter-regional Workshop on disaster preparedness and health managment, Jakarta 1987, p. 87-114.
(online at: http://cidbimena.desastres.hn/pdf/eng/doc1534/doc1534-2c.pdf)

Katili, J.A. & A. Sudradjat (1984)- The devastating 1983 eruption of Colo volcano, Una Una island, Central Sulawesi, Indonesia. Geologisches Jahrbuch A75, p. 27-47.
(Colo Volcano on Una-Una, Gulf of Gorontalo, is related to SE dipping subduction of Sulawesi Sea Plate. Devastating pyroclastic flows during 1983 eruption phase, almost entire island swept by nuee ardente, but no casualties due to timely evacuation)

Katili, J. & A. Sudradjat (1984)- The devastating 1983 eruption of Colo volcano, Una Una island, Central Sulawesi, Indonesia. Proc. Regional Conference Mineral Hydrocarbon Resources in SE Asia, p. 467-482.
(Same as paper above)

Katili, J.A. & A. Sudradjat (1989)- A short note on the birth of a volcano in Flores Island. Geologi Indonesia (IAGI), Special Volume 60 (Katili volume), p. 397-411.
(Birth of Anak Ranakah volcano in W Flores)

Kemmerling, G.L.L. (1918)- De aardbeving van Bali op 21 januari 1917. Jaarboek Mijnwezen Nederlandsch Oost-Indie 46 (1917), Verhandelingen, 1, p. 1-48.
('The earthquake of Bali on 21 January 1917')

Kemmerling, G.L.L. (1918)- De vulkanen Goenoeng Batoer en Goenoeng Agoeng op Bali. Jaarboek Mijnwezen Nederlandsch Oost-Indie 46 (1917), Verhandelingen, 1, p. 50-77.
('The Batur and Agung volcanoes on Bali'. Investigation in 1917 of active volcanoes Gunung Agung (3142m) and Batur (1717m))

Kemmerling, G.L.L. (1919)- Beklimming van den G. Batoer, Natuurkundig Tijdschrift voor Nederlandsch-Indie 78, p. 55-65.
('Ascent of Mount Batur', Bali)

Kemmerling, G.L.L. (1919)- Een beklimming van den G. Agoeng, de Piek van Bali. Natuurkundig Tijdschrift voor Nederlandsch-Indie 78, p. 66-79.
("Ascent of the Mount Agung, the peak of Bali')

Kemmerling, G.L.L. (1920)- De '*Piek van Ternate*'. Een beklimming van de 'Piek van Ternate', 28/29 Juli 1918. Natuurkundig Tijdschrift voor Nederlandsch-Indie 80, 1, p. 37-76.
(online at: https://archive.org/details/mobot31753002490180/page/n39)
('An ascent of the Peak of Ternate volcano, 28-29 July 1918')

Kemmerling, G.L.L. (1921)- Vulkanen en vulkanische verschijnselen in de Residentien Sumatra's Westkust (noordelijk deel) en Tapanoeli door den tijdelijken geolooog bij 's Lands Mijndiensten. Vulkanologische Mededeelingen (Dienst Mijnbouw Nederlandsch-Indie, Weltevreden), 1, p. 1-93.
(online at: https://www.delpher.nl/nl/boeken/view?identifier=MMKB21:036667000:00005)
('Volcanoes and volcanic features in the Residencies Sumatra's West Coast (Northern part) and Tapanuli by the temporary geologists of the Land Mining Bureau'. Descriptions of Sumatra volcanoes Maninjau, Tandikat, Sorok Merapi, Talamau-Pasaman (Ophir))

Kemmerling, G.L.L. (1922)- Uit Indien's vulkaanrijk. Tijdschrift Koninklijk Nederlands Aardrijkskundig Genootschap (2) 39, 1, p. 1-41.
('From the Indies volcano empire'. General review with descriptions of selected Indonesian volcanoes and their eruptions and major earthquakes on Java and Sumatra between 1913-1921. Little geoscience. With rather harsh comments on work of B.G. Escher)

Kemmerling, G.L.L. (1922)- Vulkaanvormen. Handelingen 2e Nederlandsch-Indisch Natuurwetenschappelijk Congres, Bandung 1922, p. 175-184.
(online at: https://books.google.com/books?id=uCYWAQAAIAAJ&pg=RA2-PA175& Etc.)
('Types of volcanoes'. General discussion. No figures. Estimated number of volcanoes in Indonesia about 400, mainly in western part. Along length of Java is one volcano every 19km, along Sumatra every 22km. Most volcanoes simple conical stratovolcanoes and composed of mix of explosive volcanoclastic products and lava flows, often cut by lava dikes. Etc.)

Kemmerling, G.L.L. (1923)- De vulkanen van den Sangi-Archipel en van de Minahassa. Vulkanologische Mededeelingen (Dienst Mijnbouw Nederlandsch-Indie), 5, p. 1-157 (+ Volume of photos and 19 plates).
('The volcanoes of the Sangi Archipelago and the Minahassa', Molucca Sea, N Sulawesi. Major report on volcanoes in Molucca Sea volcanic island arc (Gunung Awoe, G. Taroena, G. Sahandaroeman, Banoea Woehoe active submarine volcano Mahengetand, Gunung Api (Siaoe) Makalehe, the Tagoelandand-Roeang-Pasigi group, and Minahasa volcanoes, incl. Sopoetan), with contributions of Dr. C.E. Stehn)

Kemmerling, G.L.L. (1926)- L'Archipel indien centre important de volcanisme. Bulletin of Volcanology (Bulletin Volcanologique), Napoli, 3, 1, p. 87-98.
('The Indies Archipelago, an important center of volcanism'. Overview of volcanism in Indonesian Archipelago. 90 active volcanoes)

Kemmerling, G.L.L. (1927)- Les volcans actifs de l'ile de Flores. Bulletin of Volcanology (Bulletin Volcanologique), Napoli, 1927, 11-12, p. 50-68.
('The active volcanoes of Flores island'. During Kemmerling's explorations of Flores in 1924-1925 he visited most of the 11 active volcanoes of Flores)

Kemmerling, G.L.L. (1929)- Vulkanen van Flores. Vulkanologische en Seismologische Mededeelingen, Dienst Mijnbouw Nederlandsch-Indie, Bandung, 10, p. 1-138. + Atlas.

(Text volume online at: https://www.delpher.nl/nl/boeken/view?identifier=MMKB24:076859000:00005)
(Photos and Plates volume online at: https://resolver.kb.nl/resolve?urn=MMKB24:081969000:pdf)
('Volcanoes of Flores island'. Part of results of the 'Mijnbouwkundig-Geologisch Onderzoek Flores', which started in 1920 (by H. Ehrat?) and completed by Kemmerling in 1924/1925. Flores island dominated by ~50 young volcanic centers, ~14 still active. Review of results of geological investigations between 1920-1925)

Kemmerling, G.L.L. (1929)- De actieve vulkanen van den Nederlandsch-Indischen Archipel in 1928/29. Tijdschrift Koninklijk Nederlands Aardrijkskundig Genootschap (2) 46, 4, p. 468-505.
(online at: https://resolver.kb.nl/resolve?urn=MMUBA13:001672001:pdf)
('The active volcanoes of the Netherlands Indies Archipelago in 1928/29'. Review of historic activities of 104 active volcanoes (out of >400 known volcanoes) in the Indonesian Archipelago (with updated map))

Kimberly, P., L. Siebert, J.F. Luhr & T. Simkin (1998)- Volcanoes of Indonesia, v. 1.0. Smithsonian Institution, Washington, Global Volcanism Program, Digital Information Series GVP-1 (CD-ROM).
(Compilation of data and images for modern volcanoes of Indonesia)

Klompe, Th.H.F. & D. de Waard (1952)- The recent activity of G. Marapi in Central Sumatra. Indonesian J. Natural Science (Majalah Ilmu Alam untuk Indonesia) 108, 5-6, p. 131-140.

Koperberg, M. (1910)- Verslag van een onderzoek naar de uitbarstingen in 1904 op het vulkaan-eiland Roeang bij Tagoelandang (Sangi- en Talaoet-eilanden). Jaarboek Mijnwezen Nederlandsch Oost-Indie 38 (1909), Wetenschappelijk Gedeelte, p. 205-295.
('Report of investigation of the eruptions in 1904 on volcano island Ruang near Tagulandang (Sangi and Talaud islands'))

Kriswati, E., I. Meilano, M. Hasib, A. Saepuloh, H. Kuncoro, B.G. Dewanto & A. Fuad (2024)- Explosion mechanism and volume estimation of volcanic ash during the eruption of Sinabung Volcano on February 19, 2018: Insight from kinematic GPS and seismic data. J. Volcanology Geothermal Research 447, 108034, p. 1-12.
(On February 19, 2018, Sinabung Volcano erupted explosively, destroying lava dome and producing new crater. Three phases of activity: 1 and 2 inflation with pressure source during eruption at depth of 2.3 km below summit, followed by third phase of deflation at shallow depth. Hypocenter of explosion earthquake also 2.3 km below crater. Ash weight produced ~5.6 million tons (0.006 km3) during VEI 2 Sinabung eruption)

Kuenen, P.H. (1930)- Voorlopig resultaat van een onderzoek van de G. Penanggoengan bij Soerabaia. Tijdschrift Koninklijk Nederlands Aardrijkskundig Genootschap (2) 47, p. 48-51.
('Preliminary result of an investigation of the Gn. Penangungan near Surabaya'. Description of 1600m high extinct volcano in N part of Arjuna-Welirang compex. Rocks 7 types of andesite)

Kuenen, P.H. (1933)- Experiments on the formation of volcanic cones (in connection with East Indian volcanic islands). Leidsche Geologische Mededelingen 6, 1, p. 99-118.
(Most stratovolcanoes have concave slope, steep slopes of 20°-40° near crater edge, gradually slope decreasing towards foot in broad flat plain. In volcanic cones in which loose ejecta dominate over lava flows profile tends to be straight line, corresponding to natural angle of repose of materials. Variations in strength of eruption may cause convex slopes, but practically always tend to produce concave profiles. Concavity of most volcanoes attributed to secondary causes)

Kuenen, P.H. (1935)- Contributions to the geology of the East Indies from the Snellius expedition. Part I. Volcanoes. Leidsche Geologische Mededelingen 7, p. 273-334.
(online at: www.repository.naturalis.nl/document/549556)
(Brief descriptions and sketches of volcanoes on E Java, Gunung Api, Serua and Tidore, based on observations during 15-month Snellius Expedition (1929-1930) to Indonesia)

Kuenen, P.H. (1945)- Volcanic fissures, with examples from the East Indies. Geologie en Mijnbouw, N.S., 7, 3-4, p. 17-23.

(online at: https://drive.google.com/file/d/0B7j8bPm9Cse0S3ZmOTNXYmR6Qk0/view)
(Review of volcanic fissures and volcanic lines, with examples of Halmahera, E Java, etc.)

Kuno, H. (1966)- Lateral variation of the basalt magma type across continental margins and island arcs. Bulletin of Volcanology (Bulletin Volcanologique) 29, p. 195-222.
(Quaternary basalts in Circum-Pacific belt and in Indonesia change from more alkaline olivine lavas farther from trench (deeper source), to more tholeiitic closer to trench (ocean side, shallower source))

Kurniawan, A. (2014)- Volcanological comparison of Toba caldera, Krakatoa caldera, Batur caldera, Tambora caldera, and Rinjani caldera. Masyarakat Ilmu Bumi Indonesia, 2014, 1, E-1, p. 1-12.
(A single subduction zone can produce different magmatic system. Sunda Trench subduction zone produces calc-alkaline magma and potassic magmas. Potassic magma type calderas (Toba, Tambora) performed greater eruption than calc-alkaline type magma caldera (Krakatoa, Batur, Rinjani))

Kurnio, H. (2019)- Geochemical characteristics of Sunda volcanic arc in Sumatra and Andaman. Indonesian J. on Geoscience (IJOG) 6, 1, p. 1-16.
(online at: http://ijog.bgl.esdm.go.id/index.php/IJOG/article/view/410/274)
(Geochemical characteristics of volcanics of Weh Island (Aceh), Tabuan (Semangko Bay) and Andaman Islands).

Kurnio, H., S. Lubis & H.C. Widi (2015)- Submarine volcano characteristics in Sabang waters. Bulletin of the Marine Geology 30, 2, p. 85-96.
(online at: http://ejournal.mgi.esdm.go.id/index.php/bomg/article/view/78/79)
(Weh Island with Sabang City at NW tip of Sumatra with volcanic cone morphology and with fumaroles, on surrounding seafloor and coastal area vents. Fumarole vents associated with common rare earth elements (REE). Co-existence between active Sumatra fault of current volcanism produce hydrothermal mineralization)

Kurnio, H., I. Syafri, A. Sudradjat & M.F. Rosana (2016)- Sabang submarine volcano Aceh, Indonesia: review of some trace and Rare Earth Elements abundances produced by seafloor fumarole activities. Indonesian J. on Geoscience (IJOG) 3, 3, p. 173-183.
(online at: https://ijog.geologi.esdm.go.id/index.php/IJOG/article/view/247/224)
(Rare earth elements at fumaroles surrounding submarine craters off Sabang island, northernmost Sumatra)

Kurnio, H. & E. Usman (2016)- Rare Earth Elements vapor transport by fumaroles in the post caldera complex of Weh Island submarine volcano, Aceh Province, Northern Sumatra. Bulletin of the Marine Geology 31, 2, p. 99-108.
(online at: http://ejournal.mgi.esdm.go.id/index.php/bomg/article/view/317/278)
(Fumaroles and solfataras are REE vapor transport agents in Weh Island submarine volcano, Aceh. Central part of Weh submarine volcano most active REE deposition, where normal faults and N-S grabens acted as channel for hydrothermal fluids reaching seafloor surface)

Kushendratno, J.S. Pallister, Kristianto, F.R. Bina, W. McCausland, S. Carn, N. Haerani, J. Griswold & R. Keeler (2012)- Recent explosive eruptions and volcano hazards at Soputan volcano- a basalt stratovolcano in north Sulawesi, Indonesia. Bulletin of Volcanology 74, 7, p. 1581-1609.
(Soputan high-alumina basalt stratovolcano in N Sulawesi-Sangihe magmatic arc. Adjacent to Quaternary Tondono caldera, but magmas distinct from caldera and other arc magmas. Soputan produces explosive eruptions with high ash plumes and pyroclastic flows. Open-vent-type volcano that taps basalt magma from greater depth, in arc-mantle wedge)

Kusnadi, I., A. Solihin & W. Irawan (2015)- Geological map of Marapi volcano, West Sumatera province. Center for Volcanology and Geological Hazard Mitigation (CVGHM), Bandung.

Kusumadinata, K. (1969)- Kumpulan data mengenai Gunung Gamkonora di Pulau Halmahera (Maluku Utara). Direktorat Vulkanologi, Bandung, p. 1-58.

('Data collection on Mount Gamkonora on Halmahera Island (North Maluku)')

Kusumadinata, K., R. Hadian, S. Hamidi & L.D. Reksowirogo (1979)- Data dasar gunung api Indonesia. Direktorat Volkanologi, Bandung, p. 1-820.
('Basic data of Indonesian volcanoes'. Descriptions of 67 Indonesian 'A-type' volcanoes, with eruptions in historical time: 10 in Sumatra/ Sunda Strait, 17 on Java, 5 in Bali/ W Nusateggara, 13 in E Nusatenggara, 7 in Banda Islands, 11 in Sulawesi/ Sangir islands and 4 in N Moluccas. Eight aditional known A-type volcanoes not yet described)

Kusumayudha, S.B., H. Murwanto, Sutarto & S.U. Choiriyah (2019)- Volcanic disaster and the decline of Mataram Kingdom in the Central Java, Indonesia. In: J. Wasowski & T. Dijkstra (eds.) GeoMEast 2018, SUCI, Springer, p. 83-93.
(online at: http://eprints.upnyk.ac.id/18101/1/2019_Kusumayudha%20et%20al_Chapter_VolcanicDisaster AndTheDeclineO%20%281%29.pdf)
(Mataram Hindu Kingdom of 7th-10th century in Central and East Java possibly collapsed as result of major volcanic disaster, most likely Merapi volcano)

Kutterolf, S., J.C. Schindlbeck-Belo, F. Muller, K. Pank, H.Y. Lee, K.L. Wang & A.K. Schmitt (2023)- Revisiting the occurrence and distribution of Indian Ocean tephra: Quaternary marine Toba ash inventory. J. Volcanology Geothermal Research 441, 107879, p. 1-45.
(Glass shards from 28 deep Indian Ocean core holes correlated to 4 known tephras from Toba (Young Yoba (74 ka), Middle Toba, and Old Toba Tuff (788 ka), and Haranggaol Dacite Tuff of 1.42 Ma) and five unidentified eruptions from N Sumatra (incl.three older events))

Ladiba, A., L. Putriyana, B. Sibarani & H. Soekarno (2018)- Review of subduction and its association with geothermal system in Sumatera-Java. Proc. 6th ITB International Geothermal Workshop (IIGW2017), Bandung 2017, IOP Conference Series: Earth and Environmental Science 103, 012021, p. 1-10.
(online at: https://iopscience.iop.org/article/10.1088/1755-1315/103/1/012021/pdf)
(Investigation of correlation between kinematics of subduction processes (slab dip, rate of subduction, etc.) and geothermal systems at overriding plate. Results remain unclear)

Lagmay, A.M.F. & W. Valdivia (2006)- Regional stress influence on the opening direction of crater amphitheaters in Southeast Asian volcanoes. J. Volcanology Geothermal Research 158, p. 139-150.
(Holocene volcanoes in Philippines and Indonesia studied to determine relationship between regional maximum horizontal stress and opening direction of volcanic amphitheatre craters. Opening of craters occurs at acute angle relative to max. stress direction)

Lavigne, F., J.P. Degeai, J.C. Komorowski, S. Guillet, V. Robert, P. Lahitte, C. Oppenheimer, M. Stoffel, C.M. Vidal, I. Pratomo et al. (2013)- Source of the great A.D. 1257 mystery eruption unveiled, Samalas volcano, Rinjani Volcanic Complex, Indonesia. USA 110, 42, p. 16742-16747.
(online at: www.pnas.org/content/110/42/16742.full.pdf+html)
(Polar ice cores with evidence of colossal volcanic eruption in 1257 or 1258 A.D., most probably in tropics, which yielded largest volcanic sulfur release to stratosphere of the past 7000 yrs. Likely source is Samalas volcano, adjacent to Mt Rinjani on N Lombok Island, where >40 km^3 of tephra were deposited. Three principal pumice fallout deposits in region and thick pyroclastic flow deposits at coast, 25 km from source. Pre-caldera topography of Mt Samalas calculated as ~4200m above sea level. Glass geochemistry of pumice matches shards in Arctic and Antarctic ice cores (see also Vidal et al. 2015))

Le Cloarec, M.F. & P.J. Gauthier (2003)- Merapi Volcano, Central Java, Indonesia: a case study of radionuclide behavior in volcanic gases and its implications for magma dynamics at andesitic volcanoes. J. of Geophysical Research: Solid Earth 108, B5, 2243, p. 1-14.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2001JB001709)

(Analyses of volcanic gases released at Gendol and Woro fumarolic fields with radionuclides strongly altered by secondary processes. High-T gases collected in the summit gas plume of primary magmatic origin and likely directly tapped in degassing magma reservoir.Etc.)

Lecuyer, F., A. Gourgoud & P. Vincent (1995)- Volcanic hazards related to the Tondano caldera (North Sulawesi-Indonesia). Periodico di Mineralogia 64, Special Issue 1-2, p. 201-204. *(Extended Abstract)*

Liniger, H. (1938)- Die Vulkane in Niederlandisch-Ostindien. Der Schweizer Geograph 15, 1-2, p. 1-16.
(online at: https://www.e-periodica.ch/digbib/view?pid=sgh-001:1938:15::7#8)
('The volcanoes in the Nederlands Indies'. Brief review in Swiss geographic journal)

Liu, P.P., L. Caricchi, S.L. Chung, X.H. Li, Q.L. Li, M.F. Zhou, Y.M. Lai, A.A. Ghani, T. Sihotang et al. (2021)- Growth and thermal maturation of the Toba magma reservoir. Proc. National Academy of Sciences USA (PNAS) 118, 45, e2101695118, p. 1-9.
(online at: https://www.pnas.org/doi/full/10.1073/pnas.2101695118)
(Caldera-forming eruptions at Toba are result of progressive thermal maturation of upper crustal magma reservoir, which grows and chemically homogenizes, by sustained magma influx over past 2.2 My. If rate of magma input was maintained since last supereruption at 75 ka, volume of potentially eruptible magma available today is minimum of ~315 km^3)

Liu, P.P., S.L. Chung, C.A. Chesner, M.H. Gao, Y.M. Lai, H.Y. Lee & Y.H. Yang (2022)- New insights into the petrogenesis of voluminous crustal-signature silicic volcanic rocks of the Toba eruptions (Indonesia). J. of Geophysical Research: Solid Earth 127, 12, e2022JB024559, p. 1-18.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2022JB024559)
(Toba example of large-volume silicic magmas in arc setting. Quaternary Toba eruptions and nearby pre-caldera Haranggaol Andesite on Sumatra significantly enriched Sr-Nd isotopes, similar to post-caldera (<74 ka) Sipisupisu basalts near Toba Caldera. Thermodynamic modeling shows Toba silicic rocks can be produced from mantle-derived basaltic melts. Binary modeling of Sr-Nd isotopes suggests Toba rocks can be produced by mixing of 5-10% of subducting Nicobar Fan sediments with depleted MORB mantle)

Liu, P.P., S.L. Chung, B. Ma, X.H. Li, Q.L. Li, H.Y. Lee & X.R. Zhang (2022)- Zircon Hf-O isotopic constraints on the origin and temporal evolution of the Toba volcanic system, Indonesia. Lithos 434-435, 106925, p. 1-7.
(Temporal evolution of Toba volcanic system from ~1.5 Ma up to now, including two super-eruptions, Young Toba (YTT) at ~74 ka and Pld Toba (OTT) at 790 ka. MTT erupted at ~501 ka. Zircon Hf-O isotopes of latest five Toba eruptions suggest enriched, heterogenous mantle source with significant crustal contamination (incl. subducted Nicobar Fan terrigenous sediments?, followed by crustal contamination during ascent or storage in shallow magma reservoirs. Two inherited zircon cores with U-Pb ages of ~154 and 197 Ma)

Liu, P.P., D.B. Wang, M.F. Zhou, X.H. Li, Q.L. Li, G.A. Gaetani, B. Monteleone & V. Kamenetsky (2023)- Constraints of boron and oxygen stable isotopes on dehydration fluids, sediment-derived melts, and crustal assimilation of the Toba volcanic system (Indonesia). Geology (GSA) 52, 3, p. 161-165.
(Arc magmas produced from mantle wedge, with possible addition of fluids and melts from serpentinites and sediments in subducting slab. Oxygen isotopic compositions of zoned olivines from post-caldera basalts and Boron contents and isotopes of basalts and glassy melt inclusions in silicic tuffs in Toba volcanic system, N Sumatra, reflect assimilation of high δ18O crustal materials during fractional crystallization, with >40% of fluids derived from serpentinites and others from altered oceanic crust and sediments)

Liu, Z., C. Colin & A. Trentesaux (2006)- Major element geochemistry of glass shards and minerals of the Youngest Toba Tephra in the southwestern South China Sea. J. Asian Earth Sciences 27, p. 99-107.
(4cm thick ash layer in Core MD01-2393 from SW S China Sea at Marine Isotope Stage 4-5 transition at ~74 ka. Morphology and geochemistry of glass shards confirm origin from Youngest Toba eruption, N Sumatra)

Luais, B. (1987)- Petrologie et geochimie (elements trace et rapports isotopiques du Sr) du magmatisme associe aux zones de subduction. Examples du Bassin Mediterraneen et des Isles de la Sonde (Merapi, Java). Thesis, Universite de Montpellier, Documents Travaux Centre Geologique Geophysique Montpellier, 9, p. 1-237.
('Petrology and geochemistry (trace elements and Sr isotopic ratios) of magmatism associated with subduction zones: examples from the Mediterraneen Basin and the Sunda Islands (Merapi, Java)')

Lubbers, J.E., A.J.R. Kent & S. de Silva (2024)- Constraining magma storage conditions of the Toba magmatic system: A plagioclase and amphibole perspective. Contributions to Mineralogy and Petrology 179, 12, p.
(74 ka Youngest Toba Tuff (YTT) is one of largest explosive eruptions in geologic record. Plagioclase crystals record decades-centuries of storage at T >750 °C, while hornblende records up to 6200 years at same Temp. YTT thermal history did not allow for large bodies of eruptible magma to be present for long periods (10^2–10^3 years). Magmas were stored for long durations at thermal conditions where they were uneruptible and only remobilized within few centuries prior to eruption)

Lundberg, J. & D.A. McFarlane (2012)- A significant middle Pleistocene tephra deposit preserved in the caves of Mulu, Borneo. Quaternary Research 77, 3, p. 335-343.
(Fluvially transported tephra in caves of Mulu, Sarawak, not Younger Toba Tephra, but older (before ~125 or before ~156 ka. Most likely location of volcanic source in Philippines)

MacLeod, N. (1989)- Sector-failure eruptions in Indonesia volcanoes. Geologi Indonesia (IAGI) 12, 1 (Prof. Dr. J.A. Katili 60 years Special Volume), p. 563-601.
(Study of 54 volcano craters that erupted with sector failures)

Malawani, M.N., F. Lavigne, C. Gomez, B.W. Mutaqin & D.S. Hadmoko (2021)- Review of local and global impacts of volcanic eruptions and disaster management practices: The Indonesian example. Geosciences (MDPI) 11, 3, p. 1-18.
(*online at: https://www.mdpi.com/2076-3263/11/3/109*)
(On impacts of volcanic eruptions at multiple scales and related-issues of disaster-risk reduction, with examples from Indonesia (Merapi, Krakatau, Samalas, Galunggung, Raung, Tambora, etc.)

Malawani, M.N., F. Lavigne, W.J. Sastrawan, Jamaluddin, A. Sirulhaq & D.S. Hadmoko (2022)- The 1257 CE cataclysmic eruption of Samalas volcano (Indonesia) revealed by indigenous written sources: Forgotten kingdoms, emergency response, and societal recovery. J. Volcanology Geothermal Research 432, 107688, p. 1-14.
(Three written sources from Lombok provide descriptions of ancient landscape of Lombok and population's response to Samalas volcano eruption in 1257 CE. Lombok may have taken up to a century to recover and new kingdoms and principalities became established by the 14h century)

Manalu L, (1986)- G. Karangetang. Berita Berkala Vulkanologi (Bull. Volcanological Survey of Indonesia), Special Edition 109, p. 1-48.
(Report on active Mount Karangetang volcano (Api Siau) on Siau Island, Sangihe island arc, N Sulawesi)

Manurung, A.E. (2020)- Vulkanostratigrafi dan petrogenesis Gunungapi Banda Api dan sekitarnya, Maluku Tengah, Provinsi Maluku. Sarjana Thesis Institut Teknologi Bandung (ITB), p. 1-61.
(online at: https://digilib.itb.ac.id/gdl/view/69959)
('Volcanostratigraphy and petrogenesis of Banda Api volcano and surroundings, Central Moluccas, Maluku Province'. Banda Api volcano complex two stages of calderaformation: Lohoir and Neira calderas. Six eruption phases. Low-K tholeiitic magma, typical island arc))

Marinelli, G. & H. Tazieff (1968)- L'Ignimbrite et la caldera de Batur (Bali, Indonesie). Bulletin of Volcanology (Bulletin Volcanologique) 32, p. 89-120.
('The ignimbrite and the Batur caldera (Bali, Indonesia)'. Batur caldera result of collapse of strato-volcano following outpouring of an ignimbritic unit (ash flow) covering N and S flanks of Batur ~22,000 years ago. Island of Bali tilted N-wards around its long axis. Outflow of ignimbrite followed long period of andesitic

activity, preceded and followed by flows of 'bandaite', a leucocratic lava with highly basic plagioclase (~80-90% An), probably generated, at shallow dephts by assimilation of aluminous strata by basaltic magma)

Matahelumual J, 1985. G Awu. Berita Berkala Vulkanologi (Bull. Volcanological Survey of Indonesia), Special Edition 107, p.1-51.
(Report on active Mt. Gunung Awu volcano in the Sangihe island arc, N Sulawesi)

Matahelumual J, (1986)- G. Makian. Berita Berkala Vulkanologi (Bull. Volcanological Survey of Indonesia), Special Edition 110, p. 1-37.
(Report on active Mt. Makian volcano, off W Halmahera, North Moluccas)

Matahelumual J, (1986)- G. Lokon-Empung. Berita Berkala Vulkanologi (Bull. Volcanological Survey of Indonesia), Special Edition 114, p. 1-52.
(Report on active Mt. Lokon-Empung volcano, Tondano Plain, N Sulawesi)

McGeary, S., A. Nur & Z. Ben-Avraham (1985)- Spatial gaps in arc volcanism: the effect of collision or subduction of oceanic plateaus. Tectonophysics 119, 1, p. 195-221.
(Many volcanic chains worldwide show gaps in pattern of active volcanoes, often related to collisions of oceanic plateaus. Examples from Indonesia include Wetar gap of Banda Arc (due to Australia collision S of Timor region) and New Guinea)

Mesdag, F.T. (1914)- Over de werkzaamheid van den Sopoetan in den jaren 1911-1912. Jaarboek Mijnwezen Nederlandsch Oost-Indie 43 (1914), Verhandelingen 1912 (1914), p. 1-7.
('On the activity of the Soputan (N Sulawesi volcano) in the years 1911-1912'.Brief 'after-the-fact' reconstruction)

Metrich, N., C.M. Vidal, J.C. Komorowski, I. Pratomo, A. Michel, N. Kartadinata, O. Prambada, H. Rachmat & Surono (2017)- New insights into magma differentiation and storage in Holocene crustal reservoirs of the Lesser Sunda Arc: the Rinjani-Samalas volcanic complex (Lombok, Indonesia). Journal of Petrology 58, 11, p. 2257-2284.
(online at: https://academic.oup.com/petrology/article/58/11/2257/4838192)
(Mineralogy and chemistry of magmas erupted over last ~12 kyr at Rinjani-Samalas volcanic complex on Lombok. Calc-alkaline series, moderately rich in K2O. Pre-caldera stage bimodality of magmas (basalt-trachydacite); post-caldera magmatism basaltic andesites. Possibly result of mixing between basalt and trachydacite melts. AD 1257 caldera-forming eruption large volume of trachydacitic magma)

Molengraaff, G.A.F. (1918)- De vulkaan Woerlali op het eiland Dammer. In: Nederlandsche Timor Expeditie 1910-1912, Vol. II, Jaarboek Mijnwezen Nederlandsch Oost-Indie 45 (1916), Verhandelingen 1, p. 1-10.
(online at: https://www.delpher.nl/nl/boeken/view?identifier=MMKB21:040193000:00001)
('The Woerlali volcano on Damar Island'. Brief description of Recent but currently forest-covered and inactive andesitic Banda Arc volcano. From brief field survey by Brouwer and Molengraaff in March 1911, when sulfur mining was conducted at solfataros on S slope of Woerlali by French company)

Mucek, A.E. (2017)- Investigating timescales of resurgence at large calderas: Post-74 ka activity at Toba caldera, Sumatra, Indonesia. PhD Thesis Oregon State University, p. 1-703.
(online at: https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/dr26z311x)
(Review of igneous activity at Toba caldera after major 74 ka 'Young Toba Tuff" eruption: lava domes, uplifted lake sediments, Sinabung activity from same Toba reservoir?, etc.)

Mucek, A., M. Danisík, S.L. de Silva, A.K. Schmitt, I. Pratomo & M. A. Coble (2017)- Post-supereruption recovery at Toba Caldera. Nature Communications 8, 15248, p. 1-9.
(online at: https://www.nature.com/articles/ncomms15248)
(Since ~74 ka YTT supereruption, Toba has been in state of resurgence. New 14C, zircon U-Th crystallization and (U-Th)/He ages show resurgence started at 69.7±4.5 ka and continued until at least ~2.7 ka, progressing

westward across caldera, as reflected by post-caldera effusive lava eruptions and uplifted lake sediment. Zircons from recent eruption of Sinabung suggest Toba magma reservoir extends beneath Sinabung)

Mucek, A., M. Danisík, S.L. de Silva, D.P. Miggins, A.K. Schmitt, I. Pratomo, A. Koppers & J. Gillespie (2021)- Resurgence initiation and subsolidus eruption of cold carapace of warm magma at Toba Caldera, Sumatra. Nature Communications Earth & Environment 2, 185, p. 1-9.
(online at: https://www.nature.com/articles/s43247-021-00260-1)
(About resurgence Toba Caldera since the YTT eruption of 74 ka, where recovery phase after climactic caldera-forming supereruption led to uplift of caldera floor as magma rebounds (i.e., viscous rebound) and new magma is intruded)

Mulyana, A.R., I.S. Sutawidjaja, D. Wahyudin, Pujowarsito & T. Setiawan (2004)- Geological map of Colo Volcano, Central Sulawesi. Centre of Volcanology and Geological Hazard Mitigation, Bandung.
(Map of active Colo volcano on Una Una island, Gulf of Tomini, C Sulawesi)

Mutaqin, B.W., F. Lavigne, D.S. Hadmoko & M.N. Ngalawani (2019)- Volcanic eruption-induced tsunami in Indonesia: a review. Proc. 2nd Int. Conference Environmental Resources Management in Global Region, Yogyakarta 2018, IOP Conference Series: Earth and Environmental Science 256, 012023, p. 1-7.
(online at: https://iopscience.iop.org/article/10.1088/1755-1315/256/1/012023/pdf)
(Listing of 24 known volcanic eruption-induced tsunamis in Indonesia sine 1600s. Largest known tsunami in Indonesia from Krakatau in 1883, with run-up of 41m)

Naen, G.N.R.B., A. Toramaru, S. Juhri, K. Yonezu, H.E. Wibowo, R.M.P.P. Gunawan, T. Disando (2023)- Distinct pumice populations in the 74 ka Youngest Toba Tuff: evidence for eruptions from multiple magma chambers. J. Volcanology Geothermal Research 437, 107804, p. 1-23.
(Four distinct pumice types distinguished in deposits of Youngest Toba Tuff (YTT; 74 ka) ignimbrite around Lake Toba, N Sumatra, suggesting eruptions from four distinct magma chambers, initiated by high supersaturation of pheno-vesicle-rich YtB magma, triggering subsequent eruptions of the YtA, YtB, YtC, and YtD magmas)

Naen, G.N.R.B., A. Toramaru, I. Suhendro, G. Agroli, I. Pratomo, E. Kriswati, H.E. Wibowo & N. Tsuchiya (2026)- Giant pumice deposit from the post-74 ka Youngest Toba Tuff (YTT) eruption: Insights into storage conditions and eruption dynamics of subaqueous eruption. J. Volcanology Geothermal Research 472, 108558, p.
(Toba Caldera Complex in N Sumatra has erupted four major ignimbrites since 1.2 Ma: Haranggaol Dacite Tuff (HDT), Old Toba Tuff (OTT), Middle Toba Tuff (MTT), and Young Toba Tuff (YTT). Giant pumice deposit preserved in lake sediments of Toba Caldera represents post-YTT activity and occurs as large clasts (>1 m). Etc.)

Nakada, S., F. Maeno, M. Yoshimoto, N. Hokanishi, T. Shimano, A. Zaennudin & M. Iguchi (2019)- Eruption scenarios of active volcanoes in Indonesia. J. of Disaster Research (Tokyo) 14, 1, p. 40-50.
(online at: https://www.fujipress.jp/jdr/dr/dsstr001400010040/)
('Event trees' of possible eruption sequences built from study of events at volcanoes Sinabung (N Sumatra) and , Guntur, Galunggung, Semeru, Kelud and Merapi (Java))

Nakada, S., A. Zaennudin, M. Yoshimoto, F. Maeno. Y. Suzuki, N. Hokanishi, H. Sasaki, M. Iguchi et al. (2019)- Growth process of the lava dome/flow complex at Sinabung Volcano during 2013-2016. J. Volcanology Geothermal Research 382, 15, p. 120-136.
(online at: www.sciencedirect.com/science/article/pii/S0377027317303700)
(Sinabung volcano in N Sumatra first erupted in 2010, starting with phreatic phase, changing to phreato-magmatic. Andesite lava dome appeared at summit crater in December 2013. Lava flows continued during collapses of lava complex, which generated pyroclastic density currents. Active until 2016 and later)

Nasution, A., M.S. Santoso, R. Chaniago & D. Mulyadi (2005)- Peta geologi Gunungapi Kerinci, Sumatera Barat dan Jambi, 1:50,000. Direktorat Vulkanologi dan Mitigasi Bencana Geologi (Directorate of Volcanology and Geological Hazard Mitigation), Bandung.
(online at: https://vsi.esdm.go.id/gallery/picture.php?/97/category/11)
('Geologic map of the Kerinci volcano, West Sumatera and Jambi'. Tallest volcano on Sumatra (3840m). Central eruption cone with 10 successive Quaternary lava flow units, 4 pyroclastic flow and 3 lahar units. Five parasitic cones. Built on older volcanic complex and meta-sediments)

Neumann van Padang, M. (1930)- Het vulkaaneiland Paloeweh en de uitbarsting van den Rokatinda in 1928. Vulkanologische en Seismologische Mededeelingen, Dienst Mijnbouw Nederlandsch-Indie, Bandung, 11, p. 1-92.
('The volcanic island Paluweh and the eruption of the Rokatinda in 1928'. Eruption of Rokatinda volcano on Paloeweh island N of Flores may have killed 1000 people. With petrographic descriptions by P. Esenwein)

Neumann van Padang, M. (1937)- Bestaat er verband tusschen den regenval op den top van de vulkanen Semeroe en Lamongan en hunne uitbarstingen? De Ingenieur in Nederlandsch-Indie (IV) 4, 1, p. IV.1- IV.7.
(online at: https://www.stichtingblauwelijn.nl/assets/files/1937-01.pdf)
('Is there a relationship between rainfall on the tops of volcanoes Semeru and Lamongan and their eruptions?'. Junghuhn suggested possible increased number of small eruptions of Semeru, East Java, during rainy season, but this is not supported by available data. With extensive listing of known volcanic acitivities of Semeru (since 1818) and Lamongan (since 1808))

Neumann van Padang, M. (1938)- Uber die Unterseevulkane der Erde. De Ingenieur in Nederlandsch-Indie (IV) 5, 5, p. IV.69- IV.83.
(online at: https://www.stichtingblauwelijn.nl/assets/files/1938-05.pdf)
('On the submarine volcanoes on Earth'. Review of 158 submarine volcanoes worldwide, incl. 7 from Indonesia (Anak Krakatau, Nieuwerkerk, Emperor of China, Yersey Reef, Banua Wuhu and 3 unnamed features))

Neumann van Padang, M. (1938)- Uber die Unterseevulkane der Erde (Fortsetzung). De Ingenieur in Nederlandsch-Indie (IV) 5, 6, p. IV.85- IV.104.
(online at: https://www.stichtingblauwelijn.nl/assets/files/1938-06.pdf)
(Continuation of paper above. Submarrine volcanoes of Japan, Taiwan, W Pacific, New Zealand, Melanesia, Hawaii, etc.))

Neumann van Padang, M. (1940)- Shifting craters of the Talakmau volcano, Sumatra. J. of Geomorphology (New York) 3, p. 218-226.
(Talakmau (also called Talamau, Ophir) in W Central Sumatra is composite volcano, with progressive shift of younger eruptive centers from NE to SW. With 19937 eruption)

Neumann van Padang, M. (1950)- Dertig jaren vulkanologisch onderzoek in Indonesie. Tijdschrift Koninklijk Nederlands Aardrijkskundig Genootschap (2) 67, 5, p. 541-565.
('Thirty years of volcanological research in Indonesia'. History of Bandung Volcanological Survey in 1920-1950. Founded in September 1920 as 'Vulkaanbewakingsdienst', as department within 'Dienst van het Mijnwezen' (Bureau of Mines), after the 1919 catastrophic eruption of Kelud volcano, E Java. Etc.)

Neumann van Padang, M. (1951)- Catalogue of the active volcanoes of the world including solfatara fields. Part 1: Indonesia. Int. Volcanological Association, Napoli, p. 1-271.
(Encyclopedic overview of all 128 known volcanoes in Indonesia. Three categories: A. Volcanoes with eruptions in historical time (78), B. Volcanoes in solfatara and fumarole stage (29) and C. Solfatara and fumarole fields (21). Geographically subdivided by Sumatra (1-29), Sunda Straits (1), Java (35), Lesser Sunda Islands (28), Banda Sea (9), Celebes (13), Sangihe islands (5), Halmahera (7) and New Guinea (1). (for updated and expanded version see by K. Kusumadinata (1979), Direktorat Vulkanologi Indonesia; JTvG))

Neumann van Padang, M. (1960)- Measures taken by the authorities of the Vulcanological Survey to safeguard the population from the consequences of volcanic outbursts. Bulletin of Volcanology (Bulletin Volcanologique) 23, p. 181-192.

Neumann van Padang, M. (1963)- The temperatures in the crater region of some Indonesian volcanoes before the eruption. Bulletin of Volcanology 26, 1, p. 319-336.
(Temperature variations in tops of volcanoes as measured by personnel of the Volcanological Survey in the former Dutch East Indies in the 1920s-1930s at Merapi, Papandayan, Slamet and Anak Krakatau, proved to be poor indicators of imminent eruptions)

Neumann van Padang, M. (1971)- Two catastrophic eruptions in Indonesia, comparable with the Plinian outburst of the volcano of Thera (Santorini) in Minoan time. Acta First International Scientific Congress on the volcano of Thera, Athens 1969, Archaeological Services of Greece, p. 51-63.
(Comparison of Plinian eruption with enormous volumes of pumice of Santorini island, Greece, with those of Tambora (Sumbawa, 1815) and Krakatoa (W of Java, 1883). Krakatoa and Tambora eruptions lasted only two days and led to collapse of tall volcanic edifices)

Neumann van Padang, M. (1983)- History of the volcanology in the former Netherlands East Indies. Scripta Geologica 71, p. 1-76.
(online at: https://repository.naturalis.nl/document/148698)
(Frequently cited paper on the history of volcano research in Indonesia, with listing of active volcanoes/ activity from late 1800's to ~1930)

Neumann van Padang, M., R.J. Fryer & C. Titulaer (1970)- Catalogue of terrestrial crateriform structures, Part 2, Indonesia. European Space Research Organisation, Neuilly, S.P. 93, p. 1-74.
(Catalogue of calderas in Indonesia)

Neumann van Padang, M. & T.W. Gevers (1925)- Ubersicht uber die Vulkane Niederlandisch Indien nach der Litratur der letzten funf Jahre. Zeitschrift fur Vulkanologie 9, 3, p. 79-126.
(read online at: https://babel.hathitrust.org/cgi/pt?id=uc1.b2931138&seq=119)
('Overview of the volcanoes of the Netherlands Indies based on the literature of the last five years'. Rel. extensive review, mainly based on reports by G. Kemmerling, N.Taverne, H. Witkamp, H. Brouwer, C.E. Stehn, etc., in 1919-1924)

Newhall, C.G. & D. Dzurisin (1988)- Historical unrest at large calderas of the world. U.S. Geological Survey (USGS) Bull. 1855, p. 1-1108. (2 volumes)
(online at: http://pubs.usgs.gov/bul/1855/report.pdf)
(Global review of Recent activity of volcanoes with large calderas. With sizeable chapters on Indonesia (p. 255-351) and Papua New Guinea (p. 197-244))

Nho, E.Y., M.F. Le Cloarec, B. Ardouin & W.S. Tjetjep (1996)- Source strength assesment of volcanic trace elements emitted from the Indonesian arc. J. Volcanology Geothermal Research 74, p. 121-129.
(Estimates of emission of volatile metals in volcanic sources of Indonesian Arc. SO_2 emission 3.5 × 106 tons/ year, or ~20% of annual worldwide volcanic flux of SO2. Trace metal (210Po, Pb, Bi, Cd, Zn and Cu) fluxes ~5-30% of global volcanic flux, i.e. low relatively low)

Nicholls, I.A. & D.J. Whitford (1976)- Primary magmas associated with Quaternary volcanism in the western Sunda arc. In: R.W. Johnson (ed.) Volcanism in Australasia, Elsevier, Amsterdam, p. 77-90.
(Pleistocene- Recent lavas of W Sunda Arc dominated by basaltic andesite and andesite, with average 55% silica. Most lavas have Mg/Mg +Fe2 values, too low to be unmodified products of partial melting of peridotitic mantle. Further differentiation to produce andesitic- dacitic magmas probably at rel. low pressure)

Nicholls, I.A. & D.J. Whitford (1978)- Geochemical zonation in the Sunda volcanic arc, and the origin of K-rich lavas. Bull. Australian Soc. Exploration Geophysicists (ASEG) 9, p. 93-98.

(*Sunda volcanic arc good example of variation in geochemistry of lavas across island arc. In addition to correlation between K2O/SiO2 ratios and depths to Benioff Zone in Pleistocene-Recent-lavas of Java, there are well-defined relationships for 'incompatible' elements (Rb, Cs, Ba) and light rare earth elements. Volcanic centers of Java indicate progressive change in conditions of primary basaltic magma production across arc)*

Nicholls, I.A., D.J. Whitford, K.L. Harris & B. Taylor (1980)- Variation in the geochemistry of mantle sources for tholeiitic and calc-alkaline mafic magmas, western Sunda volcanic arc, Indonesia. Chemical Geology 30, p. 177-199.
(online at: https://www.academia.edu/47138931/Variation_in_the_geochemistry_of_mantle_sources_for_tholeiitic_and_calc_alkaline_mafic_magmas_Western_Sunda_volcanic_arc_Indonesia)
(Quaternary lavas of normal island-arc basalt-andesite-dacite association in Java-Bali range from tholeiitic series over Benioff-zone depths of ~150 km to high-K calc-alkaline series over Benioff-zone depths of 250km. More abundant and diverse calc-alkaline lavas over intermediate Benioff-zone depths. Basaltic lavas become slightly more alkaline with increasing depth to the Benioff zone. Levels of incompatible minor and trace elements (K, Rh, Cs, Ba, Nb, U, Th, light REE) show increase of almost order of magnitude)

Ninkovich, D. (1979)- Distribution, age and chemical composition of tephra layers in deep-sea sediments off western Indonesia. J. Volcanology Geothermal Research 5, p. 67-86.
(Volcanic ash layers in deep-sea sediments of NE Indian Ocean, adjacent to W Indonesian range in age from Late Miocene- Recent. Three provinces: (1) large Late Miocene and younger rhyolitic tephra province off Sumatra; (2) restricted dacitic province off Sunda Strait and W Java; and (3) andesitic province off E Java and Lesser Sunda Islands. Chemical composition of tephra layers in each province remains constant with time. E-ward decrease in silica content in tephras coincides with similar decrease in Indonesian arc lavas. High silica content in Sumatra linked to thick pre-Cenozoic crust. E of Sumatra crust is Cenozoic and thin)

Ninkovich, D. & W.L. Donn (1976)- Explosive Cenozoic volcanism and climatic implications. Science 194, 4268, p. 899-906.
(Study of volcanogenic material in DSDP and other cores from E and SE Asia. Indonesia Cenozoic magmatic history two major phases: first extended into E Miocene, second began in Late Miocene and lasted until today. With map of Indian Ocean areas covered with rhyolitic and andesitic ash layers SW of Sumatra and S of Java)

Ninkovich, D. & W.L. Donn (1977)- Cenozoic explosive volcanism related to East and Southeast Asian arcs. In: M. Talwani & W. Pitman (eds.) Island arcs, deep sea trenches and back-arc basins, American Geophysical Union (AGU), Maurice Ewing Series 1, p. 337-347.
(Study of history of Cenozoic explosive volcanism using DSDP and piston core data from Indian Ocean off Indonesia and W Pacific Ocean)

Nossin, J.J. (2005)- Volcanic hazards in Southeast Asia. In: A. Gupta (ed.) The physical geography of Southeast Asia, Oxford University Press, p. 250-274.

Nugraha, A.D., N. Indrastuti, R. Kusnandar, H. Gunawan, H. Triastuty & W. McCausland (2019)- Joint 3-D tomographic imaging of Vp, Vs and Vp/Vs and hypocenter relocation at Sinabung volcano, Indonesia from November to December 2013. J. Volcanology Geothermal Research 382, p. 210-223.
(online at: https://www.sciencedirect.com/science/article/pii/S0377027316303250)
(Travel time tomography from volcanic-tectonic events between November and December 2013)

Nurfiani, D., X. Wang, H. Gunawan, H. Triastuty, D. Hidayat, S.J. Wei, B. Taisne & C. Bouvet de Maisonneuve (2021)- Combining petrology and seismology to unravel the plumbing system of a typical arc volcano: an example from Marapi, West Sumatra, Indonesia. Geochem. Geophysics Geosystems 22, 4, e2020GC009524, p. 1-25.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2020GC009524)
(Marapi volcano in Sumatra characterized by frequent short-lived, small eruptions (VEI 1-2. In past 250 years, volcano erupted >60 times. Petrologic study of summit bombs uses pyroxene, plagioclase and glass

compositions for P and T of magma storage estimates of 4-7 kbar (~15-26 km). Inversion reveals low velocity zone at 15-21 km depth and is likely magma storage)

Oppenheimer, C. (2002)- Limited global change due to the largest known Quaternary eruption, Toba ~74kyr BP?. Quaternary Science Reviews 81, p. 1593-1609.
(≈74 kyr BP 'super-eruption' of Toba volcano in Sumatra is largest known Quaternary eruption. A possible 6 year long 'volcanic winter' following eruption has been proposed, but previous estimates of globally averaged surface cooling of 3-5°C after eruption probably too high; closer to 1°C)

Oppenheimer, C. (2003)- Climatic, environmental and human consequences of the largest known historic eruption; Tambora Volcano (Indonesia) 1815. Progress in Physical Geography 27, 2, p. 230-259. *(online at: www.researchgate.net/publication/233720521_Climatic_environmental_and_human_consequences_of_the_largest_known_historic_eruption_Tambora_volcano_Indonesia_1815)*
(1815 eruption of Tambora volcano (Sumbawa) expelled around 140 gt of magma (equivalent to ≈50 km^3 of dense rock), making it largest known historic eruption. More than 95% erupted as pyroclastic flows, but 40% of material ended up as ash fallout from 'phoenix' clouds that lofted above flows during emplacement. Short-lived plinian explosions preceded main eruption and caldera collapse, propelling plumes up to 43 km altitude. Over 71,000 people died on Sumbawa and Lombok. Eruption injected ≈60 mt of sulfur into stratosphere, forming global sulfate aerosol veil in stratosphere, resulting in anomalously cold weather in N Hemisphere)

Pacey, A., C.G. Macpherson & K.J.W. McCaffrey (2013)- Linear volcanic segments in the central Sunda Arc, Indonesia, identified using Hough Transform analysis: implications for arc lithosphere control upon volcano distribution. Earth Planetary Science Letters 369-370, p. 24-33.
(manuscript online at: https://dro.dur.ac.uk/11833/1/11833.pdf)
(In Sunda Arc most volcanoes define four en echelon, linear segments, each of 500-700 km length. Volcanoes of Java that do not lie on these segments either formed at early stage in history of arc and erupted anomalous magma, or lie along other mapped structures)

Palfreyman, W.D., R.W. Johnson, R.J.S. Cooke & R.J. Bultitude (1986)- Volcanic activity in Papua New Guinea before 1944: an annotated bibliography of reported observations. Bureau Mineral Resources Geology Geophysics, Canberra, Report 254, p. 1-194.
(online at: https://d28rz98at9flks.cloudfront.net/15175/Rep_254.pdf)
(Annotated bibliography of 750 references on volcanoes and volcanic activity in PNG before 1944)

Pallister, J. with USGS and CVGHM (2013)- Impromptu guide to the volcanology of the North Sulawesi - Sangihe region and fieldtrip guide for the Tomohon area. p. 1-21.
(online at: http://earth.leeds.ac.uk/esc_wg/Oldwork/Indonesia/workshop2013_files/fieldguide.pdf)
(Handy overview of 10 active volcanoes and a 20x30km caldera in N Sulawesi, at S end of Sangija Arc system, compiled from Lecuyer (1998) and CVGHM (Indonesian Center for Volcanology and Geologic Hazard Mitigation) and VDAP (USGS-USAID Volcano Disaster Assistance Program) work)

Paris, R., A.D. Switzer, M. Belousova, A. Belousov, B. Ontowirjo, P.L. Whelley & M. Ulvrova (2014)- Volcanic tsunami: a review of source mechanisms, past events and hazards in Southeast Asia (Indonesia, Philippines, Papua New Guinea). Natural Hazards 70, 1, p. 447-470.
(online at: http://repo.kscnet.ru/1328/1/tsun-2014.pdf)
(Many volcanoes in SE Asia potentially cause tsunamis in oceans and present hazard to rapidly developing coasts)

Pearce, N.J.G., J.A. Westgate, E. Gatti, J.N. Pattan, G. Parthiban & H. Achyuthan (2014)- Individual glass shard trace element analyses confirm that all known Toba tephra reported from India is from the c. 75-ka Youngest Toba eruption. J. Quaternary Science 29, 8, p. 729-734.
(Glass shards from all Toba tephra samples from India thus far analysed, same multi-population composition as Young Toba Tuff and are products of ~75-ka Youngest Toba eruption. Composition different from Oldest Toba Tuff (OTT) in Layer D from ODP site 758 (~800 ka))

Pearce, N.J.G., J.A. Westgate, G.A.R. Gualda, E. Gatti & R.F. Muhammad (2019)- Tephra glass chemistry provides storage and discharge details of five magma reservoirs which fed the 75 ka Youngest Toba Tuff eruption, northern Sumatra. J. Quaternary Science 35, 1-2, p. 256-271.
(online at: www.researchgate.net/publication/336557616_Tephra_glass_chemistry_provides_storag Etc.)
(Youngest Toba Tuff contains five distinct glass populations, representing five compositionally distinct pre-eruptive magma batches that fed eruption. Glass population proportions in distal tephra and proximal material describe eruption starting by emptying deepest reservoirs. Later, shallower magma reservoirs erupted)

Petroeschevsky, W.A. (1949)- A contribution to the knowledge of the Gunung Tambora (Sumbawa). Tijdschrift Koninklijk Nederlands Aardrijkskundig Genootschap (TKNAG), Amsterdam, 66, p. 688-703.
(Description of Tambora volcano on Sumbawa, based on visit in May 1947. Previous surveys by H. Zollinger (1847) and J. Pannekoek van Rheden (1913). Volcano thought to be extinct, until major 1815 eruption, which reduced its height from ~4000 to 2850m, produced ~150 km^3 of ash, and directly and indirectly killed 92,000 people. Rocks described as olivine basalts, leucite tephrites/ leucite basanites, and glassy lava bombs with biotite)

Petroeschevsky, W.A. (1952)- The volcanic activity in Indonesia during the period 1942-1948. Berita Gunung Berapi, Volcanological Survey Indonesia, Bandung, 1, 1-2, p. 9-31.
(in both English and Indonesian. Activity of volcanoes of Sumatra and Java. Volcano observation work during this period much hampered by poliical developments (the former Head of the Volcanological Survey in Bandung, W. Petroeschevsky, retired to Sydney, Australia in 1950))

Petroeschevsky, W.A. (1953)- The volcanic activity in Indonesia during the period 1942-1948, Part II, The volcanoes of the Lesser Sunda Islands and the Southern Moluccas. Berita Gunung Berapi 3-4, Volcanological Survey Indonesia, Bandung, p. 17-30.
(Part 2 of 3-part series. On volcanic activity of Rinjani (Lombok), volcanoes on Flores, Adonara, Pantar, etc.))

Petroeschevsky, W.A. & T.H.F. Klompe (1950)- Het vulkanologisch onderzoek in Indonesia. In: Een eeuw natuurwetenschap in Indonesia 1850-1950, Gedenkboek Koninklijke Natuurkundige Vereeniging (KNV), Chronica Naturae 106, 5, Vorkink, Bandung, p. 187-206.
(online at: https://resolver.kb.nl/resolve?urn=MMTEY01:179539012:pdf)
('History of volcanological investigations in Indonesia', in 'A century of natural sciences in Indonesia 1850-1950' book. With listings of 130 active volcanoes and years of eruptions)

Petroeschevsky, W.A. & T.H.F. Klompe (1951)- Vulcanological investigations in Indonesia. O.S.R. (Organization Scientific Research in Indonesia) Publ. 23, Bandung, p. 1-16.
(English version of Petroeschevsky & Klompe (1950), above)

Phua, M., F. Forni, S. Eisele, H. Rifai, M. Mohtadi, A. Luckge & C. Bouvet de Maisonneuve (2025)- A late Pleistocene-Holocene record of explosive eruptions from Central Sumatra (Indonesia) in the western Sunda volcanic arc. Bulletin of Volcanology 87, 31, p. 1-24.
(online at: https://link.springer.com/article/10.1007/s00445-025-01813-4)
(Sumatra island home to>130 active or potentially active volcanoes wita history of explosive eruptions. Several highly explosive eruptions (VEI) ≥ 6) are known (Toba caldera, etc.), but moderately explosive eruptions (VEI 3–5) less well studied. New data from C Sumatra (rhyolitic Malintang, Tandikat, Marapi, Ranau pyroclastic eruptions) and distal marine tephra ash layers provides improved tephrochronological framework for late Pleistocene-Holocene explosive volcanism in Sumatra (13 ash layers identified for last 5 kyrs))

Prambada, O., A. Zaennudin, Iryanto, I. Santosa, N. Nakada & M. Yoshimoto (2011)- Peta geologi Gunungapi Sinabung, Provinsi Sumatera Utara, 1:50,000. Pusat Vulkanologi dan Mitigasi Bencana Geologi (Center for Volcanology and Geological Hazard Mitigation), Bandung.
(online at: https://vsi.esdm.go.id/gallery/picture.php?/100/category/11)

('Geologic map of the Sinabung Volcano, North Sumatra Province'. Major active Quaternary volcano, with 17 lava flows and 8 pyroclastic flows units distinguished, all from single crater. Surrounded by Toba pyroclastic pumice-rich flow unit. Built on a.o. Permian limestone))

Prata, A.T., A. Folch, A.J. Prata, R. Biondi, H. Brenot, C. Cimarelli, S. Corradini et al. (2020)- Anak Krakatau triggers volcanic freezer in the upper troposphere. Nature Scientific Reports 10, 3584, p. 1-13.
(online at: https://www.nature.com/articles/s41598-020-60465-w)
(Discussion of short-lived volcanically-triggered tropospheric cooling caused by eruption(s) of Anak Krakatau in 22-28 December 2018, which formed convective anvil cloud, reaching 16-18km above sea level, and was ice-rich and ash-poor)

Pratama, A., M. Aufaristama, A. Luthfian, M.Z. Tuakia, R.B. Nareswari, P.B. Suryanata, G.N.R.B. Naen, A. Fadhilah & Nurhidayat (2025)- Morphological and magnetic analysis of Nieuwerkerk Volcano, Banda Sea, Indonesia: Preliminary hazard assessment and geological interpretation. Geosciences(MDPI) 5, 9, 353, p. 1-27.
(online at: https://www.mdpi.com/2076-3263/15/9/353)
(Nieuwerkerk submarine volcano is 50 km E of Emperor of China volcano in S Banda Sea. One of largest submarine volcanic edifices in Banda Sea (diameter 80x 30 km, height above seafloor 3460 m). With twin peaks and indications of sector collapse and landslide deposits. Most recent historical unrest recorded in 1925 and 1927 (Neumann van Padang 1983). Potential forgeneration of volcanic tsunamis, more study required)

Pratomo, I. (2006)- Klasifikasi gunung api aktif Indonesia, studi kasus dari beberapa letusan gunung api dalam sejarah. Jurnal Geologi Indonesia 1, 4, p. 209-227.
(New classification of Indonesian active volcanoes: Tambora (caldera formation), Merapi (lava dome), Agung (open crater), Papandayan (sector failure), Batur (post-caldera activities), Sangeangapi (lava flows) and Anak Krakatau types (volcano islands and submarine volcano))

Primulyana, S., I.S. Sutawidjaja, O. Prambada & A. Zaenuddin (1993)- Peta geologi Gunungapi Sibual Buali, Provinsi Sumatera Utara, 1:50,000. Pusat Vulkanologi dan Mitigasi Bencana Geologi (Center for Volcanology and Geological Hazard Mitigation), Bandung.
(online at: https://vsi.esdm.go.id/gallery/picture.php?/99/category/11)
('Geologic map of the Sibual Buali volcano, North Sumatra Province'. Quaternary volcano with 14 andesitic and basalt-andesitic lava flow units, 1819m high, built on older volcanics)

Prothero, D.R. (2018)- When humans nearly vanished: the catastrophic explosion of the Toba volcano. Smithsonian Books, p. 1-187.

Purbo-Hadiwidjoyo, M.M., M.L. Sjachrudin & S. Suparka (1979)- The volcano-tectonic history of the Maninjau caldera, western Sumatra, Indonesia. In: W.J.M. van der Linden (ed.) Fixism, mobilism or relativism: Van Bemmelen's search for harmony, Geologie en Mijnbouw 58, 2, p. 193-200.
(online at: https://drive.google.com/file/d/0B7j8bPm9Cse0T3BxRWpTaFRPUlU/view)
(Mt. Maninjau 15km W of Bukittinggi, W Sumatra, three stages:(1) pre-volcanic edifice stage, (2) pre-caldera stage (number of strato-volcanoes forming N-S oriented Maninjau volcanic complex) and (3) caldera-formation stage. Caldera-formation stage preceded by ejection of ~220-250 km^3 of pumiceous tuff, followed by collapse of top part of volcano, and radial failure of W flank. Two eruptions of acid magma: (1) unwelded and (2) welded tuff. Since then obvious volcanic activity ceased)

Rachmat, H. (2016)- Magmatic evolution Rinjani volcano complex based on eruption product analysis. Ph. D. Thesis Padjajaran University, Bandung, p. *(Unpublished)*

Rachmat, H. & U. Kurdiawan (2018)- Rinjani: dari evolusi hingga geopark. Museum Geologi-Badan Geologi, Bandung, p. 1-209.
(History of Mount Rinjani volcano on Lombok island, from caldera formation by a massive, globally impactful eruption in 1275, to its recognition as world geological heritage site and UNESCO Global Geopark in 2018)

Rachmat, H. & I. Mujitahid (2003)- Gunungapi Nusa Tenggara Barat. Indonesian Association Geologists (IAGI), Special Publ. 1, p. 1-141.
('Volcanoes of West Nusa Tenggara')

Rachmat, H. & U. Kurdiawan (2018)- Rinjani: dari evolusi hingga Geopark. Museum Geologi, Badan Geologi, Bandung, p. 1-227.
('Rinjani: from its evolution to Geopark'. Lombokvolcano study)

Rachmat, H., M.F. Rosana, A.D. Wirakusumah & G. Abdul-Jabbar (2016)- Petrogenesis of Rinjani post-1257-caldera-forming-eruption lava flows. Indonesian J. on Geoscience (IJOG) 3, 2, p. 107-126.
(online at: https://ijog.geologi.esdm.go.id/index.php/IJOG/article/view/311/209)
(Catastrophic 1257 caldera-forming eruption of Old Rinjani on Lombok followed by appearance of new Rombongan and Barujari Volcanoes within caldera, composed of calc-alkaline and high K calc-alkaline porphyritic basaltic andesite)

Rachmat, H. & A.D. Wirakusumah (2017)- The magmatic evolution of lava flows post Rinjani caldera formation. Proc. Joint Convention HAGI-IAGI-IAFMI-IATMI (JCM 2017), Malang, Art. 11, p.
(Rinjani Caldera on Lombok Island with caldera of 6 x 7 km, formed after catastrophic eruption and collapse of the old Rinjani volcano in 13th century. Study of post caldera lava formations).

Rahmanto, R., A. Saepuloh, E. Kriswati & H.D. Purnamasar (2025)- Volcanoes segmentation at the western Sunda Arc based on satellite-derived geological lineaments and land surface temperatures. J. Engineering and Technological Sciences (JETS) (ITB) 57, 3, p. 327-342.
(online at: https://jets.itb.ac.id/jets/article/view/155/183)
(Western Sunda volcanic arc stretches across Sumatra and Java, and hosts 83 active volcanoes, including Mts. Sinabung, Krakatau, Tangkuban Parahu, Merapi, Semeru, etc.). Study of surface lineaments and temperature allows subdivision of W Sunda Arc into nine zones, 5 in Sumatra, 4 in Java)

Raible, C.C., S. Bronnimann, R. Auchmann, P. Brohan, T.L. Frolicher, H.F. Graf, P. Jones et al. (2016)- Tambora 1815 as a test case for high impact volcanic eruptions: Earth system effects. WIREs Climate Change 7, 4, p. 569-589.
(online at: www.ncbi.nlm.nih.gov/pmc/articles/PMC6686350/pdf/WCC-7-569.pdf)
(Good review of climate impacts from the 1815 Tambora eruption on Sumbawa, incl. likely strengthening of wintertime stratospheric polar vortex, global cooling, slowdown of water cycle, weakening of summer monsoon circulations,strengthening of Atlantic Meridional Overturning Circulation, and decrease of atmospheric CO_2)

Rampino, M.R. & S.H. Ambrose (2000)- Volcanic winter in the Garden of Eden: the Toba supereruption and the late Pleistocene human population crash. In: F.W. McCoy & G. Heiken (eds.) Volcanic hazards and disasters in human antiquity, Geological Society of America (GSA), Special Paper 345, p. 71-82.
(online at: www.researchgate.net/publication/279723381_Volcanic_winter_in_the_Garden_of_Eden_ Etc.)
(Toba eruption in N Sumatra at ~73,500 B.P. largest explosive eruption of last few 100k years.Produced abundant dust and H2SO4 aerosols, and ice-core data indicate ~6-yr residence time for global aerosol cloud. Aerosol loading probably caused 'volcanic winter' with possible regional coolings of 15° C and global cooling of 3-5° C for several years.Tropical vegetation probably destroyed.Genetic studies indicate humans suffered severe population bottleneck sometime before ~60,000 yrs ago, followed by rapid population increase and migrations. Possible connection between Toba event and human population bottleneck)

Rampino, M.R. & S. Self (1982)- Historic eruptions of Tambora (1815), Krakatau (1883) and Agung (1963), their stratospheric aerosols, and climatic impact. Quaternary Research 18, 2, p. 127-143.
(Decreases in surface temperatures after eruptions of Tambora, Krakatau and Agung were of similar magnitude, although amounts of dust and volatiles injected into stratosphere differed greatly. Large amounts of fine ash and volatiles dispersed into upper atmosphere by Krakatau and Tambora; Agung eruption in 1963 was smaller, but injected dust and volatiles into stratospheric aerosol layer more directly. Agung eruption relatively rich in SO_2 and Cl. Relative amounts of fine ash produced by Tambora, Krakatau and Agung eruptions

estimated at 150: 20: 1, atmospheric sulfate aerosols ~7.5: 3: 1. Decreases in surface T after volcanic eruptions mainly result of sulfate aerosols, rather than silicate dust)

Rampino, M.R. & S. Self (1992)- Volcanic winter and accelerated glaciation following the Toba super-eruption. Nature 359, 6390, p. 50-52.
(Eruption of Toba in Sumatra 73,500 years ago largest known explosive volcanic event in Late Quaternary. Model calculations of climatic effects of volcanic cloud suggest it may have produced 'volcanic winter', followed by few years surface-temperature decreases of 3-5 °C. Eruption during Stage 5a-4 transition of oxygen isotope record may have accelerated shift to glacial conditions that was already underway)

Rampino, M.R. & S. Self (1993)- Climate- volcanism feedback and the Toba eruption of ~74000 years ago. Quaternary Research 40, p. 269-280.
(online at: https://zenodo.org/record/1229950/files/article.pdf)
(Toba eruption (~74,000 yrs ago) during δ18O Stage 5a-4 transition period of rapid ice growth and falling global sea level, which may have been a factor in creating stresses that triggered volcanic event. Stratospheric dust and sulfuric acid aerosol clouds may have created brief cooling ('volcanic winter'), with N Hemisphere surface T decreases of ~3°-5°C. Summer T decreases of >10°C at high N latitudes adjacent to regions already covered by snow may have increased snow/ sea-ice extent, accelerating cooling already in progress)

Ranneft, T.S.M. (1979)- Segmentation of island arcs and application to petroleum geology. J. Petroleum Geology 1, 3, p. 35-53.
(Island arcs commonly depicted as curved or sinuous, but most are composed of straight segments whose trend changes suddenly at hinge or boundary zones (multiple transverse faults). Fracture system may be related to structural, morphological, or movement of underthrusting slab, or movement in backdeep or overthrusting sheet. Transverse structural systems had effect on petroleum accumulations of island arc regions, both from stratigraphic and structural viewpoint. Examples of modern Indonesian arc system)

Reid, M.R. & J.A. Vazquez (2017)- Fitful and protracted magma assembly leading to a giant eruption, Youngest Toba Tuff, Indonesia. Geochem. Geophysics Geosystems 18, 1, p. 156-177.
(online at: http://onlinelibrary.wiley.com/doi/10.1002/2016GC006641/epdf)
(Eruption of 74 ka Youngest Toba Tuff of N Sumatra produced 2800 km^3 of ignimbrite and coignimbrite ashfall. Relatively many zircons nucleated before earlier eruption at 501 ka, but most zircons yielded interior dates 100-300 ka thereafter. Zircon growth likely episodic over protracted time intervals of >100- >500 ka. Repeated magma recharge may have contributed to development of compositional zoning in YTT, but perturbations to magma reservoir over >400 ka did not lead to eruption until 74 ka)

Reubi, O. & A. Nicholls (2004)- Variability in eruptive dynamics associated with caldera collapse: an example from two successive eruptions at Batur volcanic field, Bali, Indonesia. Bulletin of Volcanology 66, 2, p. 134-148.
(Batur volcanic field in Bali two caldera-forming eruptions, at 29,300 and 20,150 years BP., resulting in deposition of dacitic ignimbrites. Ubud Ignimbrite covers most of S Bali and consists dominantly of pyroclastic flow with minor pumice fall deposits. Gunungkawi Ignimbrite more limited extent, occurs only in central S Bali)

Reubi, O. & A. Nicholls (2004)- Magmatic evolution at Batur volcanic field, Bali, Indonesia: petrological evidence for polybaric fractional crystallization and implications for caldera-forming eruptions. J. Volcanology Geothermal Research 138, p. 345-369.
(Batur volcanic field in Bali underwent complex evolution that comprised three periods of building and two major caldera-forming eruptions)

Reubi, O. & A. Nicholls (2005)- Structure and dynamics of a silicic magmatic system associated with caldera-forming eruptions at Batur Volcanic Field, Bali, Indonesia. Journal of Petrology 46, 7, p. 1367-1391.
(online at: http://petrology.oxfordjournals.org/content/46/7/1367.full.pdf+html)
(Quaternary Batur volcanic field in Bali ~150 km above Benioff zone and adjacent to active Agung volcano and extinct or dormant Bratan caldera. Two caldera-forming eruptions and broad range of compositions from low-

SiO2 andesite to high-SiO2 dacite. Earliest volcanism was building of Penulisan basaltic-dacitic stratovolcano starting at least at ~510 ka. Collapse of first caldera associated with eruption of dacitic Ubud ignimbrite at 29,300 yrs BP. After formation of Bunbulan lava-dome complex collapse of second caldera, with eruption of Gunungkawi Ignimbrite at 20,150 yrs BP. Followed by 1700 m high, basaltic andesite Batur stratovolcano)

Rittmann, A. (1953)- Magmatic character and tectonic position of the Indonesian volcanoes. Bulletin of Volcanology 14, p. 45-58.
(Review of chemical compositions of magmas of Indonesian active volcanoes. Volcanoes classified as (1) Calc-alkaline (= Pacific; 30/ 91%), (2) Alkaline (= Atlantic; 2; 6%) and Potassic (= Mediterranean; 1/ 3%). Calc-alkaline character of magmas of active volcanoes decreases regularly in direction from foredeep to hinterland, becoming alkaline in hinterland itself. Also, at single volcanoes calc-aIkaline character decreases with time, 'confirming migration of axis of orogen towards foredeep')

Romeur, M. (1991)- Series magmatiques arc et arriere-arc de la Sonde: nature des sources impliquees (elements en trace et isotopes Sr-Nd-Pb). Doct. Thesis Universite de Bretagne Occidentale, Brest, p. 1-451.
(online at: https://archimer.ifremer.fr/doc/00034/14540/11815.pdf)
('Arc and back-arc magmatic series of Sunda arc: nature of involved sources'. Three geochemical zones: arc, backarc and an intermediate zone. Focus on back-arc potassic basalts of Sumatra (Jambi, Sukadana) and Karimunjawa islands in Java Sea)

Roothaan, H.P. (1929)- Notities omtrent eenige jonge Nederlandsch-Indische eruptiefgesteenten. Natuurkundig Tijdschrift voor Nederlandsch-Indie 89, 3, p. 506-516.
(online at: https://resolver.kb.nl/resolve?urn=MMTEY01:179529004:pdf)
('Notes on some young Netherlands Indies eruptive rocks'. Petrographic descriptions and chemical analyses (conducted at ETH Zurich) of selected recent volcanic rocks from S Sumatra, Java and N Sulawesi, No specific conclusions)

Rubin, K.H., G.E. Wheller, M.O. Tanzer, J.D. MacDougall, R. Varne & R. Finkel (1989)- 238U decay series systematics of young lavas from Batur volcano, Sunda Arc. J. Volcanology Geothermal Research 38, p. 215-226.

Ryu, S., H. Kitagawa, E. Nakamura, T. Itaya & K. Watanabe (2013)- K-Ar analyses of the post-caldera lavas of Bratan volcano in Bali Island, Indonesia- Ar isotope mass fractionation to light isotope enrichment. J. Volcanology Geothermal Research 264, 4, p. 107-116.
(online at: https://www.researchgate.net/profile/Eizo-Nakamura/publication/260972302_K-Ar_analyses_of_the_post-caldera_lavas_of_Bratan_volcano_in_Bali_Island_Indonesia_-_Ar_isotope_mass_fractionation Etc.)
(Post-caldera lavas of Bratan volcano on Bali are basalts to andesites and typical of subduction-related tectonic setting. K-Ar ages ~14, 31, 55, 66, 94 and 125 ka)

Saing, U.B., P. Bani, N. Haerani, A. Aiuppa, S. Primulyana, H. Alfianti, D.K. Syahbana & Kristianto (2020)- First characterization of Gamkonora gas emission, North Maluku, East Indonesia. Bulletin of Volcanology 82, 5, 37, p. 1-11.
(manuscript online at: www.researchgate.net/publication/340847611_First_characterization_of_Gamk Etc.)
(Gamkonora little-studied active volcano of W Halmahera arc. Most extreme eruption in May 1673 (VEI 5 event). First magmatic gas analyses in range of high-T gas emissions from Indonesian volcanoes. Rock analyses indicate basaltic andesite to andesite source)

Saing, U.B., P. Bani & Kristianto (2014)- Ibu volcano, a center of spectacular dacite dome growth and long-term continuous eruptive discharges. J. Volcanology Geothermal Research 282, p. 36-42.
(online at: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.872.6550&rep=rep1&type=pdf)
(Ibu volcano on NW Halmahera one of most active volcanoes in Indonesia. Resumed activity in 1998. Lava dome of dacite composition is developing at rate of 3182 m³/ day)

Sandberg, C.G.S. (1914)- Batoer-Agoeng massief met den Molengraaff-ketel op Bali. Verslagen Geologische Sectie, Geologisch-Mijnbouwkundig Genootschap, The Hague, 1914, p. 161-.
(Early description of active Batur-Agung volcano complex on Bali. Located in large caldera ~12 km in diameter, here named 'Molengraaff-kettle')

Schrikker, A. (2016)- Disaster management and colonialism in the Indonesian Archipelago, 1840-1920. In: G. Bankoff & J. Christensen (eds.) Natural Hazards and Peoples in the Indian Ocean World, Palgrave Macmillan, New York, p. 225-254.
(Discussion of three historic volcanic disasters in Indonesia: (1) eruption and earthquake on Ternate island in Eastern Indonesia in 1840; (2) eruption, earthquake and tidal wave on Sangihe Besar island, N of Menado, in 1856; and (3) eruption of Gunung Kelud in 1919 in E Java. Kelud disaster of 1919 marked the beginning of a new, prevention-oriented, colonial policy towards volcanic hazards)

Schroder, W. (2002)- The Krakatoa event and associated phenomena: a historical review. Earth Sciences History 21, 2, p. 199-206.
(Mainly on global atmospheric phenomena in 1883-1886 related to the world-wide atmospheric pollution of volcanic dust and volatiles from the Krakatau eruption of 1883)

Schulz, H., K.C. Emeis, H. Erlenkeuser, U. von Rad & C. Rolf (2002)- The Toba volcanic event and interstadial/stadial climates at the marine isotopic stage 5 to 4 transition in the northern Indian Ocean. Quaternary Research 57, 1, p. 22-31.
(Toba volcanic event documented in marine sediment cores from NE Arabian Sea. Distinct concentration spikes and ash layers of rhyolithic volcanic shards near marine isotope stage 5-4 boundary with chemical composition of 'Youngest Toba Tuff'. Toba event between two warm periods lasting few millennia. Toba had only minor impact on evolution of low-latitude monsoonal climate on centennial to millennial time scales)

Self, S., R. Gertisser, T. Thordarson, M.R. Rampino & J.A. Wolff (2004)- Magma volume, volatile emissions, and stratospheric aerosols from the 1815 eruption of Tambora. Geophysical Research Letters 31, L20608, p. 1-4.
(online at: http://onlinelibrary.wiley.com/doi/10.1029/2004GL020925/epdf)
(New estimates for mass of magma and aerosol generated by Tambora in 1815: 30 -33 km^3 magma, 53-58 Tg SO2, and 93-118 Tg sulfate aerosols. Aerosol cloud distributed globally, but more in S than in N Hemisphere)

Self, S. & M.R. Rampino (2012)- The 1963-1964 eruption of Agung Volcano (Bali, Indonesia). Bulletin of Volcanology 74, 6, p. 1521-1536.
(online at: https://www.researchgate.net/publication/257428344_The_1963-1964_eruption_of_Agung_volcano_Bali_Indonesia)
(On largest volcanic eruption in Indonesia since Krakatoa in 1883. Early lava flow followed by two explosive phases and deadly lahars. Two related but distinctly different magma types: porphyritic basaltic andesite and andesite. (Agung 1963 released enough SO2 to form a global stratospheric sulphate aerosol layer that led to vivid sunsets, and briefm global cooling)

Senduk, K.G. & M. Abdurrachman (2023)- Volcanostratigraphy in the Lokon Volcano area and its surroundings, North Sulawesi. Bulletin of Geology (ITB) 7, 2, p. 1144-1154.
(online at: https://buletingeologi.com/index.php/buletin-geologi/article/view/279/88)

Shibata, S., G.N.R. Bunga Naen, Y. Kaneda, I. Suhendro, C. Kusu & T. Hasegawa (2025)- Cooling timescale and process of welded facies of Youngest Toba Tuff, North Sumatra, Indonesia. Proc. 6th Int. Conf. Environmental Resources Management in Global Region (ICERM 2024), Yogyakarta, IOP Conference Series: Earth and Environmental Science 1443, 012016, p. 1-12.
(online at: https://iopscience.iop.org/article/10.1088/1755-1315/1443/1/012016/pdf)
(The 74 ka Youngest Toba Tuff (YTT) super-eruption is one of argest caldera-forming eruptions on Earth. Analysis of ~100m thick welded facies of YTT exposed at 30km from caldera, suggests interior part of ignimbrite remained hot at ~ 600 °C for 30 years after deposition)

Sigurdsson, H. & S. Carey (1989)- Plinian and co-ignimbrite tephra fall from the 1815 eruption of Tambora volcano. Bulletin of Volcanology 51, p. 243-270.
(Deposits of April 1815 Tambora eruption sequence start with four widespread ash fall layers, locally overlain by up to eight pyroclastic flow deposits. With isopach maps of F1, F2, F3 and F4 Plinian tephra layers. F-5 deposit is co-ignimbrite ash fall, generated largely during entrance of pyroclastic flows into ocean. Large volume of F-5 ash requires eruption of 50 km^3)

Sigurdsson, H. & S. Carey (1992)- Eruptive history of Tambora volcano, Indonesia. In: E.T. Degens, H.K. Wong & M.T. Zen (eds.) The sea off Mount Tambora. Mitteilungen Geologisch-Palaontologisch Institut, Universitat Hamburg 70, p. 187-206.

Sigurdsson, H. & S. Carey (1992)- The eruption of Tambora in 1815: environmental effects and eruption dynamics. In: C.R. Harington (ed.) The year without a summer? World climate in 1816. Canadian Museum of Nature, Ottawa, p. 16-45.

Singh, A. & A.K. Srivastava (2022)- Had Youngest Toba Tuff (YTT, ca. 75 ka) eruption really destroyed living media explicitly in entire Southeast Asia or just a theoretical debate? An extensive review of its catastrophic event. J. Asian Earth Sciences X, 7, p. 1-11.
(online at: https://www.sciencedirect.com/science/article/pii/S2590056022000044)
(Pleistocene Young Toba eruption estimated to be 3,500 times bigger than historic Tambora eruption. Eruption often viewed as catastrophic event that resulted in deforestation and human bottlenecks, but 'a thoroughly carried out literature review' suggests diversified vegetation and animals persisted)

Situmorang, T. & K.A.S. Astadiredja (1983)- Volkanistratigrafi suatu konsep pemetaan geologi gunungapi Kuarter. Proc. 12th Annual Conv. Indonesian Association Geologists (IAGI), p. 189-199.
('Volcanostratigraphy, some mapping concepts of the geology of Quaternary volcanoes.)
(Lake Toba ash event (75 ka; ~20 cm thick) and Australasian tektite layer (0.7 Ma; near Brunhes/Matuyama magnetic reversal) identified in Hole 758C, Indian Ocean W of N Sumatra)

Smit, J., A.J.M van Eijden & S. Troelstra (1991)- Analysis of the Australasian microtektite event, the Toba Lake event, and the Cretaceous/Paleogene boundary, eastern Indian Ocean. In: J. Weissel et al. (eds.) Proc. Ocean Drilling Program (ODP), Scientific Results, College Station, 121, p. 489-503.
(online at: www-odp.tamu.edu/publications/121_SR/VOLUME/CHAPTERS/sr121_25.pdf)
(Lake Toba ash event (75,000 yrs ago) recovered in Hole 758C, had minor influences on foraminiferal populations. Australasian tektite event (just below Brunhes/Matuyama magnetic reversal at ~0.7 Ma) probably had some influence on foraminiferal ecology, because larger specimens become scarce just above microtektite layer. Cretaceous-Paleogene boundary of Hole 752B does not show obvious anomalous trace-element concentrations)

Smith, J. (2006)- Climactic effects of the 1815 eruption of Tambora. Hohonu J. of Academic Writing, Hawaii, 5, 7, p. 26-32.
(online at: https://hilo.hawaii.edu/campuscenter/hohonu/volumes/volume5-2007)
(Review of effects of the 1815 Tambor eruption on global climate)

Soeria-Atmadja, R., R.C. Maury, H. Bellon, J.L. Joron, Y. Cyrille, H. Bougault & Hasanuddin (1985)- The occurrence of back-arc basalts in Western Indonesia. Proc. 14th Annual Conv. Indonesian Association Geologists (IAGI), Jakarta, p. 125-132.
(online at: https://www.iagi.or.id/web/digital/40/PIT_IAGI_1985_paper12.pdf)
(Back-arc volcanics, behind Sunda Arc and different composition: primitive basalts resembling basalts from extensional environments at Sukadana (S Sumatra, Quaternar) and Karimunjawa islands (C Java Sea, latest Miocene- Pliocene 6.5- 1.8 Ma))

Soeria-Atmadja, R., Y. Sunarya, Sutanto & Hendaryono (1998)- Epithermal gold-copper mineralization associated with Late Neogene magmatism and crustal extension in the Sunda- Banda arc. Bull. Geological Society Malaysia 42, p. 257-268.
(online at: www.gsm.org.my/products/702001-100841-PDF.pdf)
(Majority of gold-copper mineralization along Sunda- Banda arc low-sulphide- epithermal, related to Late Neogene eruptions of fine silicic/acidic pyroclastics of calc-alkaline affinity. Rel. wide distribution of Late Miocene- Pliocene acidic tuffs on Java, possibly related to caldera collapse or graben subsidence)

Soeria-Atmadja, R., Y. Sunarya, Sutanto & Hendaryono (2001)- Epithermal gold-copper mineralization, Late Neogene calc-alkaline to potassic calk-alkaline magmatism and crustal extension in the Sunda- Banda arc. In: G.H. Teh et al. (eds.) Proc. Geological Society Malaysia (GSM) Annual Geological Conf. Pangkor, p. 39-46.
(online at: https://gsmpubl.files.wordpress.com/2014/10/agc2001_07.pdf)
(Same paper as Soeria-Atmadja, Sunarya et al. 1998, above)

Song, S.R., C.H. Chen, M.Y. Lee, T.F. Yang, Y. Iizuka & K.Y. Wei (2000)- Newly discovered eastern dispersal of the youngest Toba Tuff. Marine Geology 167, 3-4, p. 303-312.
(Volcanic glass shards with minor biotite and hornblende in Late Pleistocene of deep-sea core of S China Sea identified as eruptive products of Youngest Toba Tuff, N Sumatra, Indonesia. Tephra layer between marine oxygen isotopic event 5.1 (79.3 ka) and event 4.22 (64.1 ka), with interpolated age of 74.0 ka, consistent with previous radiometric dating (73-75 ka). Shows 1500km NE-ward dispersal of coarse Toba glass shards)

Spina, L., E. del Bello, T. Ricci, J. Taddeucci & P. Scarlato (2021)- Multi-parametric characterization of explosive activity at Batu Tara Volcano (Flores Sea, Indonesia). J. Volcanology Geothermal Research 413, 107199, p. 1-12.
(Study of last eruptive phase of poorly studied Batu Tara volcano in Lesser Sunda Archipelago, in 2006-2015. Base of Batu Tara volcanic edifice at ~3000m below sea level)

Stauffer, P.H., S. Nishimura & B.C. Batchelor (1980)- Volcanic ash in Malaya from a catastrophic eruption of Toba, Sumatra, 30,000 years ago. In: S. Nishimura (ed.) Physical geology of Indonesian island arcs, Kyoto University, p. 156-164.

Stehn, C.E. (1923)- De G.Awoe op Groot-Sangi in het tijdperk van 20 Juni tot einde October 1922. In: G.L.L. Kemmerling, De vulkanen van den Sangi-Archipel en van de Minahassa, Vulkanologische Mededeelingen 5, p. 37-44.
('The Gunung Awu on Sangi Besar during 20 June- end October 1922')

Stehn, C.E. (1926)- Der Ausbruch des Batoer-Vulkans auf Bali 1926. Manuscript of presentation for German Club, Bandung, Deutsche Geologen-Archiv, University of Freiburg, GA 33/10, p. 1-10.
(online at: https://dl.ub.uni-freiburg.de/diglit/GA033_010/0001)
('The eruption of the Batur volcano on Bali, 1926. in August 1926'. Increased activity and lava flow eruption started on 3 August. Lava flow completely engulfed village of Batur on August 6. Stehn arrived at site on August 7. Batur basaltic-andesitic lava unusually rich in olivine, poor in pyroxene. Etc. Manuscript of presentations given at German Club in Bandung in September 1926, 4th Natural Science Congress in Batavia and 3rd Pacific Science Congress in Tokyo, 1926. No figures)

Stehn, C.E. (1926)- De uitbarsting van den Goenoeng Batoer op Bali 1926- Voorlopige mededeeling. Handelingen 4e Nederlandsch-Indische Natuurwetenschappeljk Congres, Weltevreden 1926, p. 425-430.
('The eruption of Gunung Batur on Bali 1926- preliminary communication'. Similar to above. New erurtion of lava, not connected to main Batur volcano, but from old, excentric fissure. No figures)

Stehn, C.E. (1927)- List of active volcanoes in the Netherlands East Indies. Bull. Netherlands East Indian Volcanological Survey, Bandung, 2, p. 15-19.

Stehn, C.E. (1927)- Die vulkanischen Ereignisse in Niederlandisch Indien in den Jahren 1924-1926. Zeitschrift fur Vulkanologie 11. Berlin, p. 41-52.
('The volcanic activities in the Netherlands Indies in the years 1924-1926'. Brief reviews, no major events, except Batur eruption on Bali in August 1926. With 5 plates)

Stehn, C.E. (1927-1940)- Bulletin of the Netherlands East Indian Volcanological Survey. Dienst van den Mijnbouw, Bandung, vols. 1-91.
(Series of monthly newsletters reporting volcanic phenomena across Indonesia observed during the previous month. It is a more frequently published and English-language continuation of an earlier series of volcanic activity reports named 'Vulcanologische Berichten', published in Dutch, on an annual basis in the magazine 'Natuurkundig Tijdschrift van Nederlands Indie', by Stehn's predecessors G. Kemmerling (numbers 1-12 (1921); 13-20 (1922) and N. Taverne (numbers 21-52 (1923-1925))
(issues 1-28 (1927-1929) online at: https://books.googleusercontent.com/books/content Etc.)

Stehn, C.E. (1928)- Volcanological work in the Dutch East Indies during 1923-1926. Proc. 3rd Pan-Pacific Science Congress, Tokyo 1926, National Research Council of Japan, I, p. 718-733.
(Inventory of 103 active volcanoes in Indonesia)

Stehn, C.E (1928)- De vulkaan Batoer op het eiland Bali. De Ingenieur, M. Mijnbouw, 1928, 19, p. M46.
(online at: https://resolver.kb.nl/resolve?urn=dts:2945099:mpeg21:pdf)
('The Batur volcano on the island Bali'.Summary of presentation for Kon. Instituut voor Ingenieurs on 19 December 1927 in Bandung. Major eruption started in night of 2-3 August 1926, lava along a fissure, presence of lava tunnels, etc.).)

Stehn, C.E. (1928)- De Batoer op Bali en zijn eruptie in 1926. Vulkanologische en Seismologische Mededeelingen (Dienst Mijnbouw Nederlandsch-Indie, Bandung) 9, p. 1-65.
(online at: https://books.google.com/books?id=33G4i0TFOMUC&printsec=frontcover&source=gbs_ Etc.)
(online at: www.delpher.nl/nl/boeken/objectsearch/pagejump?identifier=MMKB24:076866000:00003 Etc.)
('The Batur volcano on Bali and its eruption in 1926'. Detailed report of the 1926-1927 sequence of eruption events and its lava-rich volcanic products in the Batur volcanic complex (see also the Kemmerling 1918 report on Gunung Batur en Gunung Agung)

Stehn, C.E. (1933)- Einige Mitteilungen uber den Vulkanologischen Dienst in Niederlandisch-Indien und seine Arbeiten. Bull. Volcanologiqe (Bulletin of Volcanology), 6, 19-22, p. 13-20.
(Brief review of activities oft he Volcanological Survey, Bandung, from its inception in 1918/1920 until 1930)

Stehn, C.E. (1933)- Het praktisch nut van het vulkanologisch onderzoek in Nederlandsch Indie. De Mijningenieur 14, Bandung, p. 178-183.
('The practical use of the volcanological investigations in the Netherlands Indies')

Stehn, C.E. (1933)- Vulkanische verschijnselen en aardbevingen in den Oost-Indischen Archipel waargenomen gedurende het jaar 1932. I. Vulkanische verschijnselen in 1932. Natuurkundig Tijdschrift voor Nederlandsch-Indie 93, p. 183-185.
('Volcanic features and earthquakes in the East Indies Archipelago observed during the year 1933', composed from Bull. Netherlands India Volcanological Survey No. 53-60. Rel. little to report, except eruption of Lewotobi Lakilaki in East Flores starting May 23 and continuing through 1932)

Stehn, C.E. (1934)- Die semivulkanischen Explosionen des Pematang Bata in der Soeoh Senke (Sud-Sumatra) im Jahre 1933. Natuurkundig Tijdschrift voor Nederlandsch-Indie 94, 1, p. 46-69.
(online at: https://resolver.kb.nl/resolve?urn=MMTEY01:179531004:pdf)
('The semi-volcanic exposions of the Pematang Bata in the Soeoh rift basin (South Sumatra) in the year 1933'. Multiple loud explosions 14 days after major earthquake, associated with minor ash and small stones eruption, in small Soeoh volcano-tectonic rift basin along Sumatra Fault zone. A previous swampy area was converted to barren field covered in mud and stones, with over 100 solfatara springs and mud eruptions)

Stehn, C.E. (1935)- Vulkanische verschijnselen en aardbevingen in den Oost-Indischen Archipel waargenomen gedurende het jaar 1934. I. Vulkanische verschijnselen in 1934. Natuurkundig Tijdschrift voor Nederlandsch-Indie 95, p. 200-203.
('Volcanic features and earthquakes in the East Indies Archipelago observed during the year 1934', composed from Bull. Netherlands India Volcanological Survey No. 67-70. No figures.Main activity at Merapi, C Java, which started erupting on 1 October 1933 and continued to 10 July 1934, during which 40 ash-rock explosions took place, some associated with pyroclastic flows))

Stehn, C.E. (1936)- Register of the spots of volcanic activity in the Netherlands Indies. Bull. Netherlands East Indian Volcanological Survey, Bandung, 75, p. 1-6.
(Count of active volcanoes in Indonesia increased to 125)

Stehn, C.E. (1936)- Vulkanische verschijnselen in Nederlandsch-Indië in 1935. Natuurkundig Tijdschrift voor Nederlandsch-Indie 96, p. 197-187.
('Volcanic activities in the Netherlands Indies in 1935'. Compilation from Bulletin of the Netherlands Indies Volcanological Survey 71-74. Activities at Salak, Papandayan, Merapi pyroclastic flows, Bromo, new eruption period Krakatau Jan-July 1935 (height of Anak Krakatau decreased from 88 to 63m, Doekono active, etc.)

Stehn, C.E. (1937)- Vulkanische verschijnselen in Nederlandsch-Indië in 1936. Natuurkundig Tijdschrift voor Nederlandsch-Indie 97, p. 98-108.
('Volcanic activities in the Netherlands Indies in 1936'. Compilation from Bulletin of the Netherlands Indies Volcanological Survey Nos. 75-78, 1936-1937. Brief summaries of (relativly modest) activities of volcanoes across the Netherlands Indies in 1936)

Stehn, C.E. (1938)- Vulkanische verschijnselen in Nederlandsch-Indië in 1937. Natuurkundig Tijdschrift voor Nederlandsch-Indie 98, p. 112-127.
(online at: https://www.delpher.nl/nl/tijdschriften/)
('Volcanic activities in the Netherlands Indies in 1937'. Compilation from Bulletin of the Netherlands Indies Volcanological Survey Nos. 79-82, 1937-1938. In June-December 1937, first eruption activities of Ciremai, W Java, in 132 years. No eruptive activity at Merapi. Anak Krakatau renewed acivity in August November 1937. Dukono on Halmahera with eruptive activity through much of 1937)

Stehn, C.E. (1940)- Vulkanische verschijnselen in Nederlandsch-Indië in 1938. Natuurkundig Tijdschrift voor Nederlandsch-Indie 100, p. 17-35.
(online at: https://www.delpher.nl/nl/tijdschriften/)
('Volcanic activities in the Netherlands Indies in 1938'. Compilation from Bulletin of the Netherlands Indies Volcanological Survey Nos. 83-86 (1938-1939). Relatively quiet period. Renewed eruptive activity of Raung, E Java, in August-November 1938, Dukono active through 1938, minor activity at Anak Krakatau, etc.))

Stehn, C.E. (1940)- Vulkanologische onderzoekingen in Oost en Midden Flores. Vulkanologische en Seismologische Mededeelingen, Dienst Mijnbouw Nederlandsch-Indie, Bandung, 13, p. 1-82.
('Volcanological surveys in East and Central Flores'. On modern volcanoes of E and C Flores, based primarily on July-August 1932 fieldwork. First issue in VSM series since 1933 (manuscript completed in January 1933 but publication delayed due to budget restrictions; updated through November 1939). Complements Kemmerling (1924) monograph on Flores volcanoes. Discusses mainly volcanoes in E Flores: Lewotobi Lakilaki (erupted in 1932), Moeda, Botong, Tenawan-Leworoh-Leroboleng-chain and Larantoek)

Stolz, A.J., R. Varne, G.E. Wheller, J.D. Foden & M.J. Abbott (1988)- The geochemistry and petrogenesis of K-rich alkaline volcanics from the Batu Tara volcano, eastern Sunda arc. Contributions to Mineralogy and Petrology 98, 3, p. 374-389.
(online at: www.academia.edu/70643193/The_geochemistry_and_petrogenesis_of_K_rich_alkaline_volcanics_from Etc.)

(K-rich alkaline leucite basanite and leucite tephrite eruptives and dykes from Batu Tara volcano (50 km N of Lembata (Lomblen) in Flores Sea) reflect variable amounts of phenocrysts in melts with different compositions. Uninhabited volcano, 748m high, ~230 km above Benioff zone in region of relatively young and thin arc crust)

Stolz, A.J., R. Varne, G.R. Davies, G.E. Wheller & J.D. Foden (1990)- Magma source components in an arc-continent collision zone: the Flores-Lembata sector, Sunda arc, Indonesia. Contributions to Mineralogy and Petrology 105, p. 585-601. *(online at: www.academia.edu/4997645/Magma_source_components_in_an_arc_continent_collision_zone_the_F Etc.)*
(Trace-element and isotope data for 12 active volcanoes from Flores, Adonara, Lembata and Batu Tara in E Sunda arc suggest mantle beneath E Sunda arc is heterogeneous mixture of 3 or 4 major source components: MORB-source or depleted MORB-source, OIB-source and subducted Indian Ocean sediment)

Stothers, R.B. (1984)- The great Tambora eruption in 1815 and its aftermath. Science 224, 4654, p. 1191-1198.
(Tambora 1815 eruption on Sanggar Peninsula of Sumbawa largest and deadliest volcanic eruption in recorded history and since the last Ice Age. Combined volumes of ejecta 40-90 km^3 (dense rock equivalent), most probably ejected in 3-24 hours. Sound range was 2600 km, ash range >1300 km, pitch darkness (up to 2 days) over 600 km, pyroclastic flows at least 20 km from summit and tsunami of 1-4m shore height over at least 1200km)

Stothers, R.B. (2004)- Density of fallen ash after the eruption of Tambora in 1815. J. Volcanology Geothermal Research 134, 4, p. 343-345.
(Tambora 1815 eruption produced largest known ashfall in historical times (~100 km^3). Density of fallen ash measured at Makassar (~380 km N of Tambora) shortly after eruption: 636 kg/ m3)

Sucipta, I.G.B.E., I. Takahashima & H. Muraoka (2006)- Morphometric age and petrological characteristics of volcanic rocks from the Bajawa Cinder Cone Complex, Flores, Indonesia. J. Mineralogical and Petrological Sciences 101, 2, p. 48-68.
(online at: https://www.jstage.jst.go.jp/article/jmps/101/2/101_2_48/_pdf)
(Bajawa complex 78 cinder cones, grouped into five morphometric ages. Oldest group 0.53-0.73 Ma, Bajawa 02 (0.41- 0.51 Ma), 03 (0.32- 0.40 Ma) and 04 (0.22-0.31 Ma), youngest group 0- 0.20 Ma)

Sudradjat, A. (1975)- Batuan gunungapi dan struktur geologi di Jawa bagian Timur dan Nusatenggara bagian Barat. Geologi Indonesia (IAGI) 2, 3, p. 19-22.
('Volcanic rocks and geological structures in Eastern Java and west Nusa Tenggara')

Sudradjat, A. (1987)- The Quaternary activities of volcano island arc of Indonesia. In: Geologi Kuarter dan lingkungan hidup, Geological Research Development Centre (GRDC), Bandung, Special Publ. 7, p. 51-63.

Sudradjat, A. (1991)- Preliminary account of the 1990 eruption of the Kelut volcano. Geologisches Jahrbuch, A, 127, p. 447-462.

Sudradjat, A. (2009, 2017)- The development of volcanological investigations in Indonesia. Padjadjaran University, UNPAD Press, Bandung, p. 1-238.
(Comprehensive review of history of volcanological survey and studies in Indonesia)

Sudradjat, A. & G. Hartono (2006)- The application of volcanic facies concept in the description of the "Old Andesite Formation". Proc. International Interdisciplinary Conference Volcano International Gathering, Yogyakarta 2006, p. 1-13.
(online at: https://repository.itny.ac.id/id/eprint/2587/1/9_THE%20APPLICATION%20OF%20VOLCANIC%20FACIES%20CONCEPT%20IN%20THE%20DESCRIPTION%20OF%20THE%20%E2%80%9COLD%20ANDESITE%20FORMATION.pdf)

Sudradjat, A. & H. Rachmat (2015)- Greetings from Tambora. A potpourri of the stories on the deadliest volcanic eruption. Geological Museum, Bandung, p. 1-173.

Sugianto, N., M. Nukman & W. Suryanto (2023)- Characteristics of active volcanoes in Sumatra, Indonesia: from perspective seismicity, magma chemical composition and eruption history. Proc. 4th Geoscience and Environmental Management Symposium, Gadjah Mada University (ICST UGM), Yogyakarta 2023, E3S Web of Conferences 468, 09002, p. 1-8.
(online at: https://www.e3s-conferences.org/articles/e3sconf/pdf/2023/105/e3sconf_icstugm2023_09002.pdf)
(Review of active volcanoes of Sumatra (profiles, statistics, products, eruption histories, etc.)

Suhendro, I., Geri Agroli, G. Nogo R.B. Naen, M.A. Gurusinga, D. Nurfiani, F.P. Ayunda et al. (2025)- The fate of an extremely phenocryst-rich magma in producing small sub-Plinian plumes during the 17th and 30th April 2024 eruption of Mt. Ruang (North Sulawesi, Indonesia): The role of clast density. J. Volcanology Geothermal Research 463, 108332, p.
(Mount Raung (N Sulawesi) explosive sub-Plinian eruption of April 2024 fed by extremely crystal-rich basaltic-andesite magma reservoir)

Suhendro, I. (2024)- Evidence of the weakly stratified crystalline magma feeding an explosive Plinian eruption: A case study of the Holocene 'Malalak Tephra' deposit Tandikat volcano, West Sumatra, Indonesia. J. Asian Earth Sciences 262, 106002, p.
(Malalak Tephra layer in W Sumatra up to 5 m thick at 5 km from Plinian-type eruption vent at Tandikat volcano (2348m) in Padang Volcanic Field. Grey and white pumice fall deposits, consisting of one initial ash layer and five main lapilli layers (F0-F5), composed of glass, plagioclase, and amphibole phenocrysts. Overlies Maninjau Ignimbrite. Likely eruption age of deposit ~4,860 yrs BP, volume ~7.5-16 km3)

Suhendro, I., D.S. Hadmoko, E. Haryono & A.L. Permatasari (2025)- On the possible role of potassium enrichment for controlling the morphological evolution of stratovolcanoes into compound or caldera (Java Island, Indonesia). Geomorphology 486, 109898, p.
(All caldera volcanoes on Java Island exhibit high-K magma affinity, while compound volcanoes are dominated by medium- and low-K affinity volcanic rocks)

Suhendro, I., A. Harijoko, H.E. Wibowo, G.N. Retnaningtyas Bunga Naen, G. Agroli, D. Nurfiani et al. (2025)- Timing, process, and origin of the alkaline magmas beneath Satonda volcano (Lesser Sunda Arc, Indonesia): evidence of magma mush disruption and mobilization. Bulletin of Volcanology 87, 25, p.
(Four types of crystal-rich porphyritic lava flows at Satonda volcano, a small volcanic island 3 km NW of Sumbawa. Satonda magma significant input from slab components with low input of mantle melting. K/Ar eruption ages 115-74 ka)

Suhendro, I. & E. Haryono (2023)- Typology of Indonesian stratovolcanoes: insights from geomorphological and geological aspects. Indonesian J. Geography 55, 2, p. 275-288.
(online at: https://journal.ugm.ac.id/ijg/article/view/74692/pdf)
(Classification of morphologies of Indonesian stratovolcanoes. Four types identified: (1) small-little-dissected cones (typically ~2 km wide?, steep, dominated by basic-intermediate rocks with common mafic minerals, primarily lava flows and scoria); (2) broad-dissected cones (intermediate lava composition, poor in mafic minerals and rich in hydrous minerals, with abundant pumice and lava domes; (3) extremely broad-dissected cones with caldera (~18 km wide, gently-sloped, rich in felsic rocks and minerals, with thick ignimbrite deposits (e.g. Toba); (4) residual-highly dissected cones (moderate size (=8 km wide), gently-sloped, rich in ultrabasic rocks and mafic minerals with common exposure of intrusions (e.g. Ringgit-Beser))

Suhendro, I., T.F. Mohammad, R.A.D.i Lesmana, K.I. Indrayani, K. Nuraini, W.A. Ahmad et al. (2025)- Preliminary study on stratigraphy, petrology-geochemistry, eruption styles, and geomorphology of Merbabu volcano, Central Java, Indonesia: implication for the volcanological hazards of an infrequently active volcano. Environmental Earth Sciences 84, 141, p.
(Volcanostratigraphy, petrography and whole-rock geochemistry data of Merbabu volcano in Cl Java, Indonesia. Identified 22 pyroclastic layers, five lava flows and three lava domes. All lavas are porphyritic and pyroxene-rich, with composition from basalt to andesite. Lava domes all andesite. Etc.)

Suhendro, I., B.W. Mutaqin, D.P. Sobaruddin, L. Agustiningtyas, H. Humaid, M.A. Marfai & D.S. Hadmoko (2022)- Dynamics of two caldera-forming eruptions (Banda Besar and Naira) in the Marine Conservation Zone of Banda, Maluku, Indonesia. Geosciences (MDPI) 12, 11, 428, p. 1-30.
(online at: https://www.mdpi.com/2076-3263/12/11/428/htm)
(Two caldera-forming eruptions in Banda islands volcanic complex: Banda Besar (8×7 km; homogeneous rhyolitic magmas) and Naira (~3×3 km; homogeneous dacitic magmas)

Suhendro, I., A. Toramaru, A. Harijoko & H.E. Wibowo (2022)- The origins of transparent and non-transparent white pumice: A case study of the 52 ka Maninjau caldera-forming eruption, Indonesia. J. Volcanology Geothermal Research 431, 107643, p. 1-17.
(online at: https://catalog.lib.kyushu-u.ac.jp/opac_download_md/7161061/7161061.pdf)
(The 52 ka eruption of Maninjau caldera in Sumatra produced stratified ignimbrite with transparent and non-transparent pumices)

Suhendro, I., A. Toramaru, A. Harijoko & H.E. Wibowo (2024)- Heterogeneous pumice populations of the 52 ± 3 ka Maninjau caldera-forming eruption, West Sumatra, Indonesia: evidence of the multiple magma reservoirs feeding a large silicic eruption. J. Asian Earth Sciences 276, 3, 106332, p. 1-17.
(Maninjau eruption at 52 ka in W Sumatra was third-known largest caldera-forming event in Indonesia, after 74 ka Youngest Toba Tuff and 510 ka Middle Toba Tuff. Previously included in Padang Volcanic Field, together with Sirabungan, Tandikat, Singgalang, and Marapi volcanoes. Fed by 4 rhyolitic magma reservoirs)

Suhendro, I., A. Toramaru, T. Miyamoto, Y. Miyabuchi & T. Yamamoto (2021)- Magma chamber stratification of the 1815 Tambora caldera-forming eruption. Bulletin of Volcanology 83, 63, p. 1-20.
(online at: https://link.springer.com/content/pdf/10.1007/s00445-021-01484-x.pdf)
(Eruption of Tambora volcano in 1815 initiated by two precursory Plinian falls and formed two generations of pyroclastic density current deposits. Plinian fall units characterized by lower phenocryst abundance and higher silica content. PDC deposits relatively high crystal abundance, larger phenocrysts and lower silica. Deposit stratigraphy suggests phenocryst stratification in magma chamber prior to 1815 eruption)

Suhendro, I., E. Yuliawan, R.F. Zen, Z.Y. Rahmawati, P.E. Priyana, S. Diwijaya et al. (2024)- Petrology, geochemistry, and crystal size distribution of the basaltic andesite–dacite association at Mt. Sumbing, Central Java, Indonesia: insights to magma reservoir dynamics and petrogenesis. Acta Geochimica 43, p. 838-855.
(online at: https://link.springer.com/article/10.1007/s11631-024-00673-7)
(Active Sumbing stratovolcano in C Java with last major eruption in 1730 CE, creating prominent lava domes in crater. Volcanic rocks mainly lava flows but also pyroclastic deposits. Two types: (I; oldest) derived from Altered oceanic crust that underwent significant crustal assimilation; (II) from mantle-rich melts with less significant crustal assimilation and evolving from basaltic andesite into andesite and final stage of dacitic magma with abundant phenocrysts)

Sukhyar, R. (1982)- Vulkanostratigrafi. Proc. 11th Annual Conv. Indonesian Association Geologists (IAGI), Jakarta, p. 205-212.
(online at: https://www.iagi.or.id/web/digital/35/PIT-IAGI-1982-Paper-21.pdf)
(Brief review of volcanostratigraphy studies in Indonesia)

Sun, C., L. Wang, G. Plunkett, E. Zhang & J. Liu (2021)- An integrated Late Pleistocene to Holocene tephrostratigraphic framework for South-East and East Asia. Geophysical Research Letters 48, e2020GL090582, p. 1-11.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/pdf/10.1029/2020GL090582)
(Mainly on young tephras from Japanese and Philippine volcanoes)

Suryanata, P.B., S. Bijaksana, M. Abdurrachman, D. Dahrin, A. Pratama, N.R.D.W. Ndari & S.J. Fajar (2023)- Preliminary petromagnetic study of 1849, 1926, 1963, 1968 and 1974 surface lavas from Batur Volcano, Bali,

Indonesia: Insight on the magmatic process of source and rock magnetic nature. Rudarsko-geolosko-naftni Zbornik (Mining-Geology-Petroleum Engineering Bulletin), Zagreb, 38, 1, p. 31-40.
(online at: https://hrcak.srce.hr/file/427376)
(Geochemical and petrographic characterizations of five eruption periods of Batur Volcano on Bali reveal lavas are basaltic to andesitic in composition)

Suryo, I. (1981)- Report on the volcanic activity in Indonesia during the period 1961-1963. Bull. Volcanological Survey of Indonesia 104, p. 1-116.

Suryo, I. (1985)- Report on the volcanic activity in Indonesia during the period 1964-1970. Bull. Volcanological Survey of Indonesia 106, p. 1-150.

Sutawidjaja, I.G. (2011)- Effects of the 1815 Tambora eruption to the atmosphere and climate. Majalah Geologi Indonesia (IAGI) 26, 2, p. 65-71.
(online at: www.bgl.esdm.go.id/publication/index.php/dir/article_detail/763)
(Erupted ash and volcanic aerosols from 1815 Tambora eruption caused global climate changes for 1-2 years. Aerosol cloud spread around Earth in ~3 weeks and caused surface cooling in N Hemisphere of 0.4- 0.7 ° C)

Sutawidjaja, I.G., H. Sigurdsson & L. Abrams (2006)- Characterization of volcanic deposits and geoarchaeological studies from the 1815 eruption of Tambora volcano. Jurnal Geologi Indonesia 1, 1, p. 49-57.
(online at: www.bgl.esdm.go.id/publication/index.php/dir/article_detail/166)
(Eruption of Tambora on Sumbawa on 5-11 April 1815 generally considered as largest volcanic event in recorded history, leaving caldera 7 km in diameter and 1100m deep. Cataclysmic eruption initiated by Plinian eruption on 5 April, killing >90,000 people on Sumbawa and nearby Lombok, and depositing 40-150 cm of gray pumice and ash on slopes mainly over district W of volcano. On 11 April 8 pyroclastic surges and flows, burying ancient villages to N)

Sutawidjaja, I.S. (1990)- Evolution of Batur caldera, Bali, Indonesia. M.Sc. Thesis, Victoria University of Wellington, p. 1-238. *(Unpublished*)

Sutawidjaja, I.S. (1990)- Evolusi kaldera Batur, Bali. Proc. 19th Annual Conv. Indonesian Association Geologists (IAGI), Bandung, 2, p. 165-194.
(online at: https://www.iagi.or.id/web/digital/48/19th-(11-13-Des-1990)-Book-II-153-182.pdf)
('Evolution of the Batur caldera, Bali'. In Indonesian without English abstract)

Sutawidjaja, I.S. (2009)- Ignimbrite analyses of Batur Caldera, Bali, based on 14C dating. Jurnal Geologi Indonesia (Indonesian J. on Geoscience (IJOG)) 4, 3, p. 189-202.
(online at: https://ijog.geologi.esdm.go.id/index.php/IJOG/article/view/80)
(Batur caldera, NE Bali, is 10 x 7.5 km wide caldera, a collapse structure. Two stages of collapse: (1) Ubud Ignimbrite, at 29.3 ka; and (2) Gunungkawi Ignimbrite at 20.1 ka. Caldera-forming eruptions interrupted by silicic andesite welded ignimbrites and domes)

Sutawidjaja, I.S. (2013)- Batur global geopark, Bali. Proc. Joint ConventionHAGI-IAGI, Medan 2013, p. 1-12.
(online at: https://www.iagi.or.id/web/digital/8/2013_IAGI_Medan_Batur-Global-Geopark.pdf)
(Review of lava flows and other sites of geological interest in area of active Batur caldera and stratovolcano on Bali island)

Sutawidjaja, I.S., R. Chaniago & S. Kamal (1992)- Peta geologi kaldera Batur, Bali, Indonesia. Volcanological Survey of Indonesia. Bandung.
('Geologic map of Batur caldera, Bali, Indonesia', scale 1:50,000)

Sutawidjaja, I.S., M.F. Rosana, K. Watanabe (2015)- Magma chamber model of Batur Caldera, Bali, Indonesia: compositional variation of two facies, large-volume dacitic ignimbrites. Indonesian J. on Geoscience (IJOG) 2, 2, p. 111-124.

(online at: https://ijog.geologi.esdm.go.id/index.php/IJOG/article/view/224/196)
(Large Batur caldera is source of two major ignimbrite eruptions of similar dacitic-rhyodacitic composition, with combined volumes of ~84 and 19 km^3. Batur magma equilibrated at T of 1100- 1300° C and P of 20 kbar)

Syafitri, A., I.G.B.E. Sucipta, A.N. Arifa, A. Saepuloh & S. Widiyantoro (2021)- Pre-1963 Mount Agung eruption history and magma evolution based on petrological, mineralogical, and geochemical analyses. IAGI Journal 1, 3, p. 121-136.
(online at: https://journal.iagi.or.id/index.php/IAGIJ/article/view/375/356)
(Eruption of Mt Agung, Bali, in 1963 largest eruption after Krakatoa in 1883. Pre-1963 volcanic activity four eruption periods: pre-3200 BP, 3200-1870 BP, 1870-1040 BP and post-1040 BP. Initially mainly basalt to basaltic andesite lavas. In 1870-1040 BP common pyroclastic units formed. Etc.)

Syafitri, A., I.G.B.E. Sucipta, A.N. Arifa, A. Saepuloh & S. Widiyantoro (2022)- Tectonic setting of Mount Agung, Bali: insight from petrology and geochemistry analysis. Proc. 1st Int. Seminar on Earth Sciences and Technology (ISEST 2021), Bandung, IOP Conference Series: Earth and Environmental Science 1047, 012005, p. 1-18.
(online at: https://iopscience.iop.org/article/10.1088/1755-1315/1047/1/012005/pdf)
(Mt Agung controlled by three cogenetic magmas and can be divided into 4 eruption periods since 3200 BP. Calc-alkaline magmas derived from subduction of Indo-Australian Plate, producing basalt to dacite rocks. Analyses suggest Bali Island has continental basement (micro-continent or E end of Sundaland)

Syahbana, D.K., K. Kasbani, G. Suantika, O. Prambada, A.S. Andreas, U.B. Saing, S.L. Kunrat, S. Andreastuti et al. (2019)- The 2017-19 activity at Mount Agung in Bali (Indonesia): intense unrest, monitoring, crisis response, evacuation, and eruption. Nature Scientific Reports 9, 8848, p. 1-17.
(online at: https://www.nature.com/articles/s41598-019-45295-9)
(After 53 years of quiescence, Mt Agung in E Bali awoke in August 2017 with intense seismicity. First eruption on 21 November, with most intense explosive eruptions with lava effusion on 25-29 November. Smaller infrequent explosions and extrusions continued for years.Magma intruded into mid-crust in early 2017, and again in August 2017, prior to intrusion of inferred dike between Mt Agung and Batur Caldera)

Szymanowski, D., F. Forni, M. Phua, B. Jicha, D.W.J. Lee, Y.J. Hsu, H. Rifai, B. Schoene & C. Bouvet de Maisonneuve (2023)- A shifty Toba magma reservoir: improved eruption chronology and petrochronological evidence for lateral growth of a giant magma body. Earth Planetary Science Letters 622, 118408, p. 1-12.
(online at: https://www.sciencedirect.com/science/article/pii/S0012821X23004211)
(Toba caldera complex in N Sumatra produced at least four caldera-forming eruptions in the last 1.6 My. New attempts to determine eruption ages seem to vary considerably, depending on methods used (JTvG)).

Takada, A. (2010)- Caldera-forming eruptions and characteristics of caldera volcanoes in the Sunda Arc, Indonesia. J. Geological Society Japan 116, 9, p. 473-483. *(in Japanese, with English abstract)*
(online at: www.jstage.jst.go.jp/article/geosoc/116/9/116_9_473/_pdf)
(Discussion of caldera-formining eruptions in Sunda Arc (Krakatau, Tambora, Rinjani, etc. Small to intermediate-scale eruptions occurred several months before climactic eruptions. Distribution of eruption sites or fumarole sites expanded by several km during precursor period. Larger pre-caldera volcano edifices tend to result in larger calderas. Etc.))

Takada, A., T. Yamamoto, N. Kartadinata, A. Budianto, A. Munandar, A. Matsumoto, S. Suto & M.C. Venuti (2000)- Eruptive history and magma plumbing system of Tambora volcano, Indonesia. Report of International Research and Development Cooperation ITIT Project, Volcanic Hazard Assessment in Asia, p. 42-79

Taneda, S. (1961)- Petrochemical study on the volcanic rocks of Indonesia. Science Reports Faculty of Science, Kyushu University, Geology, 5, 4, p. 181-195.

Taneda, S. (1963)- Petrochemical studies on the active volcanoes in Eastern and Southeastern Asia. Bulletin of Volcanology 26, 1, p. 415-430.

('Alkali-lime index' decreases inward from outer zone of the arcuate zone in volcanic arcs of Kamchatka, Kurile Islands, Japan and Indonesia Islands)

Tang, G.R., W. Dan, A. Maulana, J. Wang, X.Z. Zhang, Y.Y. Zhang, X. Ma, Q. Wang et al. (2024)- Arc building and maturation of the Lombok Island, East Sunda Arc. Chemical Geology 663, 122265, p.
(Study of Cenozoic volcanic rocks on Lombok island in East Sunda intra-oceanic arc suggests three distinct magmatic periods. Three lava age groups: I (Late Eocene; tholeiitic basalts with low K2O); II (E Oligocene; ~30 Ma in S Lombok; low-K basaltic andesites-dacites), and III (Pliocene- Recent, ~3–0 Ma; medium- to high-K calc-alkaline basalt to andesite, in N Lombok). Also increasing maturation of island arc volcanism (progressive enrichment in K2O, incompatible elements and Nd-Hf isotopic compositions with time))

Tang, G.R., W. Dan, A. Maulana, J. Wang, X.Z. Zhang, X. Ma, Q. Wang, X.J. Liu & G.J. Tang (2026)- Low-δ18O magmas at Batur, Indonesia: Evidence for slab-window melting beneath arc volcanoes. Chemical Geology 702, 123224, p. 1-13.
(online at: https://www.sciencedirect.com/science/article/pii/S000925412500614X)
(Low δ18O values in olivines of Bali volcanoes Agung and Batur suggest assimilation of recycled altered oceanic crustal materials, possibly partial melting of low-δ18O lower oceanic crust, induced by hot asthenospheric flow through a slab window. Slab windows may facilitate not only formation of rear-arc ultrapotassic lavas but also influence magmatism at volcanic front)

Taverne, N.J.M. (1923)- Vulkanologie in Nederlandsch Indie. De Mijningenieur 4, p. 69-98.
('Volcanology in the Netherlands Indies'. Hard-to-find paper)

Taverne, N.J.M. (1924)- Chemische en physische waarnemingen in de Vulkanologie. In: Handelingen 3e Nederlandsch-Indische Natuurwetenschappelijk Congres, Buitenzorg, September 1924, p. 1-23.
(online at: https://resolver.kb.nl/resolve?urn=MMKB31:037731000:pdf)
(Chemical and physical observations in volcanology'. Review of chemical and analyses and physical properties (temperatures, seismicity) measured on volcanoes, with examples mainly from Java)

Tennant, E., S.F. Jenkins, A. Winson, C. Widiwijayanti, H. Gunawan, N. Haerani, N. Kartadinata et al. (2021)- Reconstructing eruptions at a data limited volcano: a case study at Gede (West Java). J. Volcanology Geothermal Research 418, 107325, p. 1-18.
(online at: https://www.sciencedirect.com/science/article/pii/S0377027321001542)

Ter Braake, A.L. (1945)- Volcanology in the Netherlands Indies. In: P. Honig & F. Verdoorn (eds.) Science and scientists in the Netherlands Indies, Board for Netherlands Indies, Surinam and Curacao, New York, p. 22-35.
(online at: https://archive.org/details/in.ernet.dli.2015.183759)
(Brief review of active volcanism in Indonesia until 1945)

Tierney, C.R. & M.R. Reid (2021)- Quartz-hosted melt inclusions as windows into magma assembly and storage processes in the Youngest Toba Tuff. Geochem. Geophysics Geosystems 22, e2020GC009564, p. 1-19.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2020GC009564)
(Quartz-hosted melt inclusions are windows into assembly and storage of magma systems like the giant body responsible for 2,800 km^3 Youngest Toba Tuff (YTT). Chemical zoning of YTT appears to have developed prior to most quartz growth, likely "bottom-up" due to mush-derived melt heterogeneity)

Tierney, C.R., M.R. Reid, J.A. Vazquez & C.A. Chesner (2019)- Diverse late-stage crystallization and storage conditions in melt domains from the Youngest Toba Tuff revealed by age and compositional heterogeneity in the last increment of accessory phase growth. Contributions to Mineralogy and Petrology 174, 31, p. 1-21.
(Study of final increment of growth on crystals to reveal dynamics and time scales of magma assembly and storage before eruption of the cataclysmic 2800 km3 Youngest Toba Tuff, N Sumatra)

Tjia, H.D. (1964)- Nature of some volcanic lineaments. Institute of Technology Bandung, Contributions Department of Geology, Institute of Technology Bandung (ITB) 54, p. 5-18.

Tjia, H.D. (1967)- Volcanic lineaments in the Indonesian island arcs. 11th Pacific Science Congress, Tokyo 1966, Bulletin of Volcanology (Bulletin Volcanologique) 31, 1, p. 85-96.
(More than 400 linear arrangements of active volcanic centers of Indonesia. Subdivided into small (on the same volcano), medium (same volcanic range), and large (connections between volcanic loci on separate cones or ranges). >70% of lineaments classified as first and second order shear, tension, and extension directions. Most volcanic lineaments along narrow zones of weakness, related to regional structure)

Tjia, H.D. (1968)- Volcanic lineaments in the Indonesian island arcs. Pacific Geology 1, p. 175-182.
(Same paper as Tjia 1967, above)

Tjia, H.D. (1969)- Breaks in slope on strato-volcanoes. Bull. of National Institute Geology and Mining (NIGM), Bandung, 2, 3, p. 35-40.
(Many stratovolcanoes of Indonesia have two slope breaks, separating three slope segments: uppermost slope of 27-30° (angle of repose of young pyroclastics), middle slope 7-11° (area of common lahars) and lower slopes 3-4° (flood-laid sediments))

Tjia, H.D. & R.F.H. Muhammad (2008)- Blasts from the past impacting on Peninsular Malaysia. Bull. Geological Society Malaysia 54, p. 97-102.
(online at: https://gsm.org.my/wp-content/uploads/gsm_file_2/702001-100478-PDF.pdf)
(At Plio-Pleistocene transition 3 large volcanic centers in Barisan Mts. (Sumatra) began producing large amounts of felsic tephra and pyroclastic flows. At Toba perhaps 4 paroxysmal events between 1.9 Ma- ~30 ka. Centers marked by 100's of m of ignimbrite, pyroclastic tuffs and air-fall tephra. Air-fall tuff identified throughout Peninsular Malaysia, up to 1m thick. Generally attributed to single 'Toba eruption' at 70-75 ka, but possibly multiple eruptions, also from other Sumatra volcanoes)

Turner, S. & J. Foden (2001)- U, Th and Ra disequilibria, Sr, Nd and Pb isotope and trace element variations in Sunda arc lavas: predominance of a subducted sediment component. Contributions to Mineralogy and Petrology 142, 1, p. 43-57.
(Isotope and major and trace element data from 19 lavas along Sunda arc. Lavas range in SiO2 from 49-75%. Important shallow-level contamination by ancient crustal materials in Sumatra. Little evidence for any effect of Australia-Indonesia collision on composition of lavas. Across-arc trends in lava composition indicate increasing relative contribution from subducted sediment (also suggested by Gao et al., 2022;JTvG)

Turner, S., J. Foden, R. George, P. Evans, R. Varne, M. Elburg & G. Jenner (2003)- Rates and processes of potassic magma evolution beneath Sangeang Api volcano, East Sunda arc, Indonesia. Journal of Petrology 44, 3, p. 491-516. *(online at: https://www.researchgate.net/publication/235223050_Rates_and_Processes_of_Potassic_Magma_Evolution_beneath_Sangeang_Api_Volcano_East_Sunda_Arc_Indonesia)*
(Sangeang Api active volcano off NE corner of Sumbawa Island. High K, silica-undersaturated, with mafic-ultramafic (pyroxenite)and gabbroic xenoliths)

Umbgrove, J.H.F. (1930)- Het vulkaaneiland Oena-Oena (Noord Celebes). Leidsche Geologische Mededelingen 3, 5, p. 249-258.
(online at: www.repository.naturalis.nl/document/549452)
('The volcanic island Una Una (North Sulawesi)'. Profile looks like an 'older' volcano. Erupted in 1898. Typical lahars present. Crater floor flat with lava dome. Some coral growth on submarine slope, but no true reefs)

Umbgrove, J.H.F. (1945)- Different types of island-arcs in the Pacific. The Geographical Journal 106, p. 198-209.
(W Pacific- Indonesia island arcs associated with deep continent-ward dipping shear plane and deep trench along outer sides (came very close to characterizing a subduction zone, long before plate tectonic theory was formulated; JTvG). Three types island arcs: double arcs (Indonesia), pseudo-single arcs (Kurile-Aleutian) and single (Marianas- Bonin) arcs)

Van Bemmelen, R.W. (1929)- Het caldera probleem. De Mijningenieur 10, 5, p. 101-112.
('The caldera problem'. Model for creation of calderas by volcano collapse after major explosive 'emptying-out' eruption, with reference to mainly Indonesian volcanoes (Toba, Tengger, Krakatau, etc.))

Van Bemmelen, R.W. (1931)- Positieve en negatieve vulkaanvormen. Tijdschrift Koninklijk Nederlands Aardrijkskundig Genootschap, Amsterdam, 2, 48, p. 1-9.
(online at: https://resolver.kb.nl/resolve?urn=MMUBA13:001675001:pdf)
('Positive and negative volcano forms'. No figures)

Van Bemmelen, R.W. (1932)- Over de genetische classificatie van negatieve vulkaanvormen. Geologie en Mijnbouw 10,19, p. 187-193.
(online at: https://drive.google.com/file/d/1jRqaykbyXVsMRHh3XHXChtFN7HbN4pCo/view)
('On the genetic classification of negative volcano forms'. Discussion of earlier papers on the 'caldera problem' by Escher, Sandberg, Tanakadate, van Bemmelen, Neumann van Padang and Van den Bosch. No figures)

Van Bemmelen, R.W. (1938)- On the origin of the Pacific magma types in the volcanic inner arc of the Soenda Mountain System. De Ingenieur in Nederlandsch-Indie (IV) 5, 1, p. IV.1- IV.15.
(online at: https://www.stichtingblauwelijn.nl/assets/files/1938-01.pdf)
(Discussion on origin of Miocene and younger calc-alkaline or Pacific magmatism on S Sumatra (Barisan Mts.) and Java (Bantam intrusions and Merawan granite batholith))

Van Bemmelen, R.W. (1943)- Register of the localities of volcanic activity in the East Indian Archipelago. Bull. East Indian Volcanological Survey 95-98 (1941), p. 5-14.
(Inventory of 130 active volcanoes in Indonesia)

Van Bemmelen, R.W. (1949)- Volcanism. Chapter III in Van Bemmelen (1949)- The geology of Indonesia, vol. 1A, The Hague, p. 188-256.
(Review of active volcanism (177 volcanoes), products volcanic eruptions, composition of volcanic products and distribution and composition of associated igneous rocks)

Van Bemmelen, R.W. (1949- Report on the volcanic activity and volcanological research in Indonesia during the period 1936-1948. Bulletin of Volcanology 9, p. 3-29.

Van Bemmelen, R.W. (1949)- Report on the volcanic activity and volcanological research in Indonesia during the period 1936-1948. Bulletin of Volcanology (Bulletin Volcanologique), ser. 2, 9, 1, p. 3-28.
(Summary of activity of Indonesia's 130 active volcanoes from 1936-1948. Detailed records collected by Netherlands Indies Volcanological Survey until Japanese occupation in 1942; after that limited information, and mainly from Java)

Van Bemmelen, R.W. (1951)- De vulkanen op Java. N.V. Moderne Boekhandel Indonesie, Jakarta, p. 1-32.
(Well-illustrated children's book on volcanoes on Java, illustrated by L.J. Eland)

Van Bemmelen, R.W. (1961)- Volcanology and geology of ignimbrites in Indonesia, North Italy, and the USA. Geologie en Mijnbouw 40, 12, p. 399-411.
(online at: https://drive.google.com/file/d/0B7j8bPm9Cse0U2R2R3pNcmtqcWM/view)
(Same title as Van Bemmelen 1963. On Java- Sumatra three Cenozoic pulses of uplift with intrusions and extrusions of acid magmas. Cenozoic deposits start with deposition of Eocene quartz sandstones and marine sediments without tuffaceous components. This was followed by Oligocene- E Miocene 'Old-Andesite' volcanoes, which are largely submarine and represent first cycle of andesitic, calc-alkaline Pacific volcanism. M Miocene second pulse of uplift with formation of proto-Semangko rift with acid magma on Sumatra (between E Miocene Telisa and M Miocene Lower Palembang beds. In Mio-Pliocene time subsidence again prevailed in Sumatra-Java belt. Andesitic volcanism resumed, forming 2nd Andesite Fm (M Palembang Beds of Sumatra,

Bentang Beds, etc of Java). At end Tertiary a third pulse of orogenic uplift, creating present Sumatra-Java geanticline, again accompanied by rifting and voluminous outbursts of acid pumiceous tuffs on Sumatra)

Van Bemmelen, R.W. (1963)- Volcanology and geology of ignimbrites in Indonesia, North Italy, and the U.S.A. Bulletin of Volcanology (Bulletin Volcanologique), ser. 2, 25, 1, p. 151-173.
(Same as Van Bemmelen 1961. Sumatra -Java arc of Indonesia three pulses of orogenic uplift after its Mesozoic geosynclinal subsidence. All three accompanied by rise and occasional ignimbritic eruptions of acid magma. 'Normal' igneous rocks of intermediate composition erupted during intervening periods)

Van Bemmelen, R.W. (1971)- Four volcanic outbursts that influenced human history. Toba, Sunda, Merapi and Thera. In: Acta First Int. Scientific Congress on the Volcano of Thera, Archaeological Service of Greece, Athens 1971, p. 5-50.

Van Bergen, M.J., R.D. Erfan, T. Sriwana, K. Suharyono, R.P.E. Poorter, J.C. Varekamp et al. (1989)- Spatial geochemical variations of arc volcanism around the Banda Sea. In: J.E. van Hinte et al. (eds.) Proc. Snellius II Symposium, Jakarta 1987, Netherlands J. of Sea Research 24, 2-3, p. 313-322.
(Active volcanoes of E Sunda Arc and Banda Arc 100-250 km above Benioff zone. Wide range of lavas, from are-tholeiitic (low-K) to leucite-bearing (alkaline) suites. Variations along and across arc. For volcanoes with similar distance to Benioff zone potassium and other incompatible elements progressively increase towards collision area near Timor, and close to Timor also increasing with increasing distance to Benioff zone)

Van Bergen, M.J., P.Z. Vroon & J.A. Hoogewerff (1993)- Geochemical and tectonic relationships in the east Indonesian arc-continent collision region: implications for the subduction of the Australian passive margin. Tectonophysics 223, 1-2, p. 97-116.
(Variations in isotope signatures along E Sunda Arc show maximum magma source contamination near extinct sector N of Timor. Increasing contribution of subducted continental material in direction of collision. Leading part of Australian continental margin reached magma generation zone in E Sunda- W Banda arc, implying subduction of continental margin deeper than 100 km)

Van Bergen, M.J., P.Z. Vroon, J.C. Varekamp & R.P.E. Poorter (1991)- Subduction of continental material in East Indonesia; a review of evidence from the geochemistry of volcanic rocks. In: E.P. Utomo et al. (eds.) Proc. The Silver Jubilee LIPI- Symposium on the Dynamics of subduction and its products, Yogyakarta-Karangsambung 1991, Research and Development Center for Geotechnology, Indonesian Institut of Sciences (LIPI), Bandung, p. 38-41.

Van Bergen, M.J., P.Z. Vroon, J.C. Varekamp & R.P.E. Poorter (1992)- The origin of the potassic rock suite from Batu Tara volcano (East Sunda arc, Indonesia). Lithos 28, p. 261-282.
(online at: www.academia.edu/20632659/The_origin_of_the_potassic_rock_suite_from_Batu_Tara_volcano Etc.)
(Batu Tara is active potassic volcano in E Sunda arc. Leucite-bearing rock suite two groups, suggesting parental magmas with different mantle origins. Trace element and isotopic compositions consistent with involvement of subducted sedimentary/crustal component as well as MORB and OIB mantle)

Van der Boon Mesch, A.H. (1826)- Disputatio geologica inauguralis de incendiis montium igni ardentium insulae Javae eorumdemque lapidibu. Doctor's Thesis Academy of Leiden, p. 1-126.
(online at: https://books.google.de/books?id=6y9TAAAAcAAJ&hl=en)
('Inaugural geological discussion on the fires of the burning mountains of the island of Java and their stones'. First or one of the first scientific studies of volcanoes on Java, adding mineralogy and chemical analyses to notes and samples from his thesis advisor, Prof. Carl Reinwardt)

Van Ijzendoorn, M.J. (1953)- The eruption of Gunung Kelud on August 31, 1951, proved the utility of the Kelud tunnelworks. Berita Gunung Berapi 3-4, Volcanological Survey Indonesia, Bandung, p. 62-73.
(Sudden eruption of Gn. Kelud in August 1951, the first since the disastrous 1919 eruption and first since completion of the tunnel lake drainage system in 1928. Due to controlled low crater lake level, hot lahars did

not form. Hot volcanic eruption products limited to 6.5 km around crater, killing 7 persons (including three Volcanological Survey personnel. Tunnel system now partly clogged and needs to be repaired))

Van Tongeren, W. (1938)- Contributions to the knowledge of the chemical composition of the Earth's crust in the East Indian Archipelago. I. The spectrographic determination of the elements according to arc methods in the range 3600-5000A., II. On the occurrence of rarer elements in the Netherlands East Indies. Doct. Thesis, University of Utrecht, Centen, Amsterdam, p. 1-181. *(Unpublished)*
(Incl. observation that Tin Islands granites are rel. rich in Rare Earth Elements)

Van Tongeren, W. (1941)- Chemical characteristics of East Indian rocks. De Ingenieur in Nederlandsch-Indie (IV) 8, 9, p. IV.77- IV.81.
(online at: https://www.stichtingblauwelijn.nl/assets/files/1941-09.pdf)
(Introduction to geochemistry of rocks from the Netherlands Indies/Indonesia)

Varekamp, J.C., M.J. Van Bergen, P.Z. Vroon, R.P.E. Poorter, A.D. Wirakusumah, R. Erfan, K. Suharyono & T. Sriwana (1989)- Volcanism and tectonics in the Eastern Sunda Arc, Indonesia. In: J.E. van Hinte et al. (eds.) Proc. Snellius II Symposium, Jakarta 1987, Netherlands J. of Sea Research 24, p. 303-312.
(Four segments distinguished by Sr isotopes in Java-Sunda-Banda volcanic arc. Adonara-Pantar segment between Flores and Alor studied here, transition between W Banda Arc volcanics (in E) with clear 'continental' signature and Sunda Arc volcanics (in W) with little evidence of subduction of continental material)

Varekamp, J.C. & R. Kreulen (2000)- The stable isotope geochemistry of volcanic lakes, with examples from Indonesia. J. Volcanology Geothermal Research 97, 1-4, p. 309-327.

Varne, R. (1985)- Ancient subcontinental mantle; a source for K-rich orogenic volcanics. Geology (GSA) 13, 6, p. 405-408.
(Mafic volcanics, ranging from calc-alkaline basalts through shoshonitic trachybasalts to leucitites, along E Sunda Arc arc from Bali (Agung) to Flores. With 3-fold enrichment in K, Rb, Sr, Ba, La and Nb, increasing toward collision zone, correlating with increasing 87Sr/86Sr and decreasing 143Nd/144Nd values. K-rich material derived from ancient subcontinental mantle. E Sunda K-rich mafic volcanism first appeared after collision began. Before collision, ancient NW Australian mantle erupted K-rich, diamond-bearing ultramafics with high Sr and low Nd ratios, part of ultrapotassic continental volcanic association)

Varne, R. & J.D. Foden (1986)- Geochemical and isotopic systematics of Eastern Sunda Arc volcanics: implications for mantle sources and mantle mixing processes. In: F.C. Wezel (ed.) The origin of arcs, Developments in Geotectonics 21, Elsevier, p. 159-189.
(E Sunda-Banda arc system erupting mafic volcanics that range from calc-alkaline basalts, through shoshonitic trachybasalts, to leucite tephrites and olivine leucitites. All typical arc-like geochemistry. K, Rb, Sr, Ba, La, and Nb contents increase threefold along arc towards collision zone. Systematic geochemical and Sr, Nd, Pb isotope changes reflect involvement of at least two sources poor in K-group elements, etc. No strong evidence that either is recently subducted upper crustal sialic material. Isotopic data suggest subcontinental mantle may be source of K-rich arc component; suboceanic mantle may be source of K-poor component)

Verstappen, H.T. (1963)- Geomorphological observations on Indonesian volcanoes. Tijdschrift Koninklijk Nederlands Aardrijkskundig Genootschap (2), 80, 3, p. 237-251.
(Well-illustrated discussion of volcanic landforms developed in loose volcanic products (= most Indonesian stratovolcanoes), landforms related to lava flows, and more complex developments (major landslides, calderas, etc.))

Verstappen, H.Th. (2005)- Volcanic islands. In: A. Gupta (ed.) The physical geography of Southeast Asia, Oxford University Press, p. 142-156.
(Brief review of distribution of volcanic islands and volcanic landforms in SE Asia)

Vidal, C.M., J.C. Komorowski, N. Metrich, I. Pratomo, N. Kartadinata, O. Prambada, A. Michel, G. Carazzo, F. Lavigne, J. Rodysill, K. Fontijn & Surono (2015)- Dynamics of the major plinian eruption of Samalas in 1257 A.D. (Lombok, Indonesia). Bulletin of Volcanology 77, 73, p. 1-24.
(online at: https://www.researchgate.net/publication/280739917_Dynamics_of_the_major_plinian_eruption_of_Samalas_in_1257_AD_Lombok_Indonesia)
(Caldera-forming eruption of Samalas (near modern Rinjani, Lombok) in 1257 AD associated with largest sulphate spike of last 2 ky recorded in polar ice cores. Four-phase continuous eruption produced 33-40 km^3 dense rock equivalent of deposits, mainly pumiceous plinian fall products, pyroclastic density current deposits and ash that could be identified 660 km from source. Eruption dynamics consistent with efficient dispersal of sulphur-rich aerosols across globe)

Vidal, C.M., N. Metrich, J.C. Komorowski, I. Pratomo, A. Michel, N. Kartadinata, V. Robert & F. Lavigne (2016)- The 1257 Samalas eruption (Lombok, Indonesia): the single greatest stratospheric gas release of the Common Era. Nature Scientific Reports 6, 34868, p. 1-13.
(online at: https://www.nature.com/articles/srep34868.pdf)
(Great 1257 eruption of Samalas (Rinjani, Lombok) released enough sulfur and halogen gases into stratosphere to produce reported global cooling during second half of 13th century)

Von Karacson, A.A. (1897)- De vulkaan Kaba op Sumatra. Tijdschrift Koninklijk Nederlands Aardrijkskundig Genootschap (2), 14, p. 555-570.
('The Kaba volcano on Sumatra'. Near Bengkulu. With introduction by R. Fennema. Surveyed in 1883. Three main craters in Kaba complex. Ash from this volcano supports the rich local coffee plantations. Two maps)

Von Komorowicz, M. (1915)- Vulkanoseismische Studien im Norden Australiens. I. Das Vulkangebirge Soepoetan in der Minahassa (Nord Celebes). Zeitschrift fur Vulkanologie 2, 3, p. 99-128 + figs. *(online at: https://books.google.com/books?id=LBw0AQAAMAAJ&pg=PA151&lpg=PA151&dq=komorowicz++Nord-Celebes+uber+die+Sangir-Inseln+und+Talaud& Etc.)*
('Volcano-seismic studies North of Australia I. The volcanic Soepoetan (Soputan) Mountains in the Minahassa (North Celebes'. Results of a survey in summer of 1913 by Swiss volcanologist, for the Netherlands Indies government to North Sulawesi and the Sangir islands. to investigate seismic events of March 1913)

Von Komorowicz, M. (1916)- Vulkanoseismische Studien im Norden Australasiens. II. Zusammenfassende Darstellung des Erdbebengebiets, das sich von Nord-Celebes uber die Sangir-Inseln und Talaud nach den Philippinen erstreckt. Zeitschrift fur Vulkanologie 2, 4, p. 151-185. *(wrong title?*
(online at: https://babel.hathitrust.org/cgi/pt?id=uc1.31822009759531&seq=221)
(Volcano-seismic studies North of Australia II: Review of the earthquake zone that extends from North Sulawesi across the Sangir islands and Talaud to The Philippines'. 1500 km long earthquake belt with active volcanoes)

Von Rad, U., K.P. Burgath, M. Pervaz & H. Schulz (2002)- Discovery of the Toba Ash (c. 70 ka) in a high-resolution core recovering millennial monsoonal variability off Pakistan. In: P.D. Clift et al. (eds.) The tectonic and climatic evolution of the Arabian Sea region, Geological Society, London, Special Publ. 195, p. 445-461.
(Toba Ash layer in NE Arabian Sea SW of Pakistan near base of 20.2m piston core. Also two younger ash layers, presumably from Indonesian volcanoes. Toba event (70 ±4 ka BP) well documented in Arabian Sea and Bay of Bengal records at end of Oxygen Isotope Stage 20. With map of known Toba ash distribution)

Vroon, P.Z. (1992)- Subduction of continental margin material in the Banda Arc, Eastern Indonesia. Sr-Nd-Pb isotope and trace-element evidence from volcanics and sediments. Ph.D. Thesis University of Utrecht, Geologica Ultraiectina 90, p. 1-205.
(online at: http://dspace.library.uu.nl/handle/1874/316569)
(Isotope and trace element geochemistry study of eastern part of Banda Arc, in area of active arc-continent collision (Romang, Damar, Teon, Nila, Serua, Manuk, Banda). Composition of samples from 7 volcanoes suggests subducted continental sedimentary material in magma increases from <1% in NE to 5-10% in SW)

Vroon, P.Z., D. Lowry, M.J. van Bergen, A.J. Boyce & D.P. Mattey (2001)- Oxygen isotope systematics of the Banda Arc: low d18O despite involvement of subducted continental material in magma genesis. Geochimica Cosmochimica Acta 65, 4, p. 589-609.
(Oxygen isotope data for 60 volcanic rocks and 15 sediments along entire Banda Arc. Generally low d18O values (excluding Serua, Ambon) compatible with 1-5% addition of subducted continental material to depleted MORB-type source in sub-arc mantle. Assimilation of up to 20% and 80% arc-crust material thought to be cause of high d18 O values of Serua and Ambon)

Vroon, P.Z. & M.J. van Bergen (2000)- Geochemical evidence for two subducting plates beneath North Sulawesi (Indonesia). Goldschmidt. Conf. 2000, J. of Conference Abstracts 5, 2, p. 1060.
(online at: https://goldschmidtabstracts.info/abstracts/abstractView?id=2000001060)
(Geochemical data for three active volcanoes from Sangihe Arc (Awu, Karangetang, Lokon, Ruang; in range of oceanic island arcs) and one from Gorontalo Bay (Colo (Una), with adakite characteristics))

Vroon, P.Z., M.J. van Bergen & E.J. Forde (1996)- Pb and Nd isotope constraints on the provenance of tectonically dispersed continental fragments in East Indonesia. In: R. Hall & D. Blundell (eds.) Tectonic evolution of Southeast Asia, Geological Society, London, Special Publ. 106, p. 445-453.
(Pb-Nd isotopes of igneous rocks on microcontinents are indicators of provenance: Ambon-Seram= S. New Guinea, Bacan= N Australia or W New Guinea, Banda Ridges= Pacific New Guinea, Sumba= Sundaland)

Vroon, P.Z., M.J. van Bergen, G.J. Klaver & W.M. White (1995)- Strontium, Neodymium and lead isotopic and trace-element signatures of the East Indonesian sediments: provenance, and implications for Banda Arc magma genesis. Geochimica Cosmochimica Acta 59, 12, p. 2573-2598.
(Trace elements and Sr-Nd-Pb isotopes show 4 major provenance areas: N New Guinea + Seram, S New Guinea, Timor, North Australia)

Vroon, P.Z., M.J. van Bergen, W.M. White & J.C. Varekamp (1993)- Sr-Nd-Pb isotope systematics of the Banda Arc, Indonesia: combined subduction and assimilation of continental material. J. of Geophysical Research: Solid Earth 98, B12, p. 22349-22366.
(Isotope datas for six active and one extinct volcano over Banda Arc. Rock types low-K tholeiitic in NE, high-K calc-alkaline in SW. Volcanoes in NE 'normal' arc signatures, in SW extreme values. Evidence for contribution of subducted continent-derived material to magma sources. Addition of 0.1-2% local sediment in NE Banda arc, and 1-3% in SW Banda Arc to Indian Ocean MORB source explain isotope trends. Serua and Romang require >5% sediment)

Wahyudin, D., M.N. Kartadinata, R. Taufiqurrahman, O. Prambada, E. Lusy, A.S. Purwoto & I. Ridwan (2009)- Peta geologi Gunungapi Banda Api, Provinsi Maluku, 1:50,000. Pusat Vulkanologi dan Mitigasi Bencana Geologi (Center for Volcanology and Geological Hazard Mitigation), Bandung.
(online at: https://vsi.esdm.go.id/gallery/picture.php?/85/category/9)
('Geologic map of the Banda Api volcano, Maluku Province'. Major Quaternary volcano complex of Banda islands group (Banda Api, Banda Neira and Lonthor islands), composed of pre-caldera (Lonthor, Neira) and post-caldera (Banda Api) deposits)

Wasmund, E. (1934)- Vulkano-telmatischer Melanientuff am Caldera-See Danau Batur auf Bali (Insulinde). Archiv fur Hydrobiologie, Supplement-Band 13, p. 292-315.
('Vulkano-telmatic melanien tuff at the Danau Batur caldera lake on Bali (Indonesia)'. Recent tuffs of Batur)

Watanabe, K., T. Yamanaka, A. Harijoko, C. Saitra & I.W. Warmada (2010)- Caldera activities in North Bali, Indonesia. J. Southeast Asian Applied Geology (UGM) 2, 3, p. 283-291.
(online at: http://geologic-risk.ft.ugm.ac.id/fresh/jsaag/vol-2/no-3/jsaag-v2n3p283.pdf)
(Two Quaternary caldera systems on Bali: Batur caldera and Buyan-Bratan caldera)

Westerveld, J. (1954)- Radioactivity and chemistry of some Indonesian eruptive rocks. Verhandelingen Koninklijke Akademie van Wetenschappen, Amsterdam, Ser. 1, 20, 4, p. 1-52.

(online at: https://dwc.knaw.nl/DL/publications/PU00010947.pdf)
(Four Mesozoic- Tertiary concentric belts of fold structures and plutonic rocks in Indonesia, connecting Burma with Philippines, each with own types of plutonic rocks and ore deposits: (1) Jurassic Malayan orogen of Malay Peninsula, Tin islands, possibly W, SW and C Kalimantan; (2) Late Cretaceous Sumatra orogen of Sumatra, C Java, Meratus; (3) M Miocene Soenda orogen (should be E Miocene; 'Old Andesites'; JTvG) of SW Sumatra, Java S Mountains, volcanic Lesser Sunda islands) and (4) the active Moluccan orogen. Late Quaternary volcanics two groups, 'Pacific' calc-alkaline and 'Mediteranean' potassic. Analyzed 157 samples for radioactivity and bulk chemical composition. Mesozoic granites from Tin islands very different petrochemistry from Kalimantan (Schwaner Mts, etc.) granites)

Westgate, J.A., P.A.R. Shane, N.J.G. Pearce, W.T. Perkins, R. Korisettar, C.A. Chesner, M.A.J. Williams & S.K. Acharyya (1998)- All Toba tephra occurrences across Peninsular India belong to the 75,000 yr B.P. eruption. Quaternary Research 50, 1, p. 107-112.
(online at: www.researchgate.net/publication/223750339_All_Toba_Tephra_Occurrences_across_P Etc.)
(All presently known Toba tephra occurrences in peninsular India belong to 75,000 yr B.P. Toba eruption. Tephra bed can be used as effective tool in correlation and dating of late Quaternary sediments across India)

Wetzel, A. (2009)- The preservation potential of ash layers in the deep-sea: the example of the 1991-Pinatubo ash in the South China Sea. Sedimentology 56, p. 1992-2009.
(After 1991eruption of Mount Pinatubo volcano, Philippines, volcanic ash transported W to S China Sea in atmospheric plume, formed up to 10cm thick graded layer over >400,000 km^2. Immediately after deposition surviving deep- burrowing animals re-opened connection to sea floor. Later, small meiofauna and macrofauna recolonized sea floor, mixing newly deposited organic material with underlying ash. Ash deposits <1mm thick not often observed as continuous layer when cored 6 years after eruption; ash ~2mm thick now patchily bioturbated. Areas affected by deposition of turbidites ash layer often preserved due to rapid burial)

Wheller, G.E. (1986)- Petrogenesis of Batur caldera, Bali, and the geochemistry of Sunda-Banda arc basalts. Ph.D. Thesis, University of Tasmania, Hobart, p. 1-156. *(Unpublished) (online at: https://figshare.com/articles/thesis/Petrogenesis_of_Batur_caldera_Bali_and_the_geochemistry_of_Sunda-Banda_arc_basalts/23241779?file=40959071)*
(Batur active volcano s produced a wide variety of basaltic (incl. leucititic magmas) to dacitic volcanic rock types during its evolution and now possesses a large double caldera. New basaltic stratovolcano forming within caldera. Etc (remarkably, no mention of the C.E. Stehn (1928) monograph on Batur/Batoer; JTvG))

Wheller, G.E. & R. Varne (1986)- Genesis of dacitic magmatism at Batur volcano, Bali, Indonesia: Implications for the origin of stratovolcano calderas. J. Volcanology Geothermal Research 28, p. 363-378.
(Batur active stratovolcano on Bali, Indonesia, with large caldera correlated with eruption at ~23,700 years ago that formed thick Bali ignimbrite sheet, covering 450 km^2. Formation of caldera due to change in lava composition from basaltic- andesitic to dacitic. Dacitic rocks characteristics consistent with origin by crystal-liquid fractionation from more mafic parent magmas in shallow chamber, possibly at 1.5 km depth and 1000-1070°C)

Wheller, G.E., R. Varne, J.D. Foden & M.J. Abbott (1987)- Geochemistry of Quaternary volcanism in the Sunda- Banda arc, Indonesia, and three-component genesis of island-arc basaltic magmas. J. Volcanology Geothermal Research 32, 1-3, p. 137-160.
(online at: https://www.academia.edu/110578826/Geochemistry_of_quaternary_volcanism_in_the_Sunda_Banda_ arc_Indonesia_and_three_component_genesis_of_island_arc_basaltic_magmas)
(Excluding Sumatra and Wetar (mainly dacitic and rhyolitic volcanics), four geochemical arc sectors in Sunda-Banda arc: W Java, Bali, Flores (each more K-rich eastwards, culminating in leucitite volcanoes Muriah, Soromundi, Sangenges and Batu Tara). Dominant source component common to all sectors probably peridotitic mantle. Second component, with high 87Sr/86Sr value, may be crustal material, most apparent in Banda sector, but also present to lesser extents in W Java and Flores sectors)

Whelley, P.L., C.G. Newhall & K.E. Bradley (2015)- The frequency of explosive volcanic eruptions in Southeast Asia. Bulletin of Volcanology 77, 1, p. 1-11.
(online at: http://link.springer.com/article/10.1007/s00445-014-0893-8?view=classic)
(~733 active and potentially active volcanoes in SE Asia region, of which 70 have erupted in last 100 years)

Whitford, D.J. (1975)- Strontium isotopic studies of the volcanic rocks of the Sunda arc, Indonesia, and their petrogenetic implications. Geochimica Cosmochimica Acta 39, p. 1287-1302.
(Pleistocene-Recent lavas from Sunda arc range from island arc tholeiitic series, through calc-alkaline to high-K alkaline rocks. Calc-alkaline suite decrease in 87Sr/86Sr from W Java to Bali with some evidence for increasing 87Sr/86Sr with increasing depth to Benioff zone. 87Sr enrichment due to isotopic equilibration of oceanic crust with sea water and disequilibrium melting in slab. Calc-alkaline lavas with high ratios best explained by sialic contamination, or presence of alkali basalt as component of downgoing slab. Sr isotopic data for high-K alkaline lavas suggest mantle origin. High ratio in Lake Toba rhyolite implies crustal origin)

Whitford, D.J., W. Compston, I.A. Nicholls & M.J. Abbott (1977)- Geochemistry of Late Cenozoic lavas from Eastern Indonesia: role of subducted sediments in petrogenesis. Geology (GSA) 5, p. 571-575.
(Late Cenozoic basalts N of Timor from Solor to Serua primitive tholeiitic, but associated more silicic rocks suggest involvement of continental crust or sediment)

Whitford, D.J. & P.A. Jezek (1979)- Origin of Late Cenozoic lavas from the Banda arc, Indonesia: trace element and Sr isotope evidence. Contributions to Mineralogy and Petrology 68, p. 141-150.
(Active arc located on what appears to be oceanic crust whereas associated subduction trench is underlain by continental crust. Recent lavas predominantly andesitic, tholeiitic in N to calc-alkaline varieties in S islands. High 87Sr/86Sr ratios in calc-alkaline lavas interpreted to result from mixing of sialic component with mantle derived component. Likely cause is subduction and melting of sea-floor sediments or continental crust)

Whitford, D.J. & P.A. Jezek (1982)- Isotopic constraints on the role of subducted sialic material in Indonesian island-arc magmatism. Geological Society of America (GSA) Bull. 93, 6, p. 504-513.
(In Banda Arc continental material (probably subducted sediments) appears to be subducting beneath volcanic arc that is underlain by oceanic crust)

Whitford, D.J. & I.A. Nicholls (1975)- Geochemistry of the volcanic rocks of the Sunda island arc of Indonesia. Exploration Geophysics 6, 2/3, p. 76-77. *(Abstract only)*
(Sunda volcanic arc from N of Sumatra, through Java, Bali, Lombok, Sumbawa, Flores, Lesser Sunda Islands, after which becomes Banda arc. Variety of tectonic environments. Sumatra crust ~40 km thick with Paleozoic granites. Benioff zone only to ~200 km. Beneath Java crust thinner and younger; oldest exposed rocks Mesozoic, and Benioff zone to ~600km beneath Java Sea to N. Further E, crust thinner (~15 km), oceanic in velocity structure and Benioff zone to great depths)

Whitford, D.J. & I.A. Nicholls (1976)- Potassium variation in lavas across the Sunda arc in Java and Bali. In: R.W. Johnson (ed.) Volcanism in Australasia, Elsevier, Amsterdam, p. 63-75.
Sunda arc of Java-Bali relatively simple tectonic setting above N-dipping Benioff seismic zone. Quaternary lavas of 'normal island arc association' (tholeiites to high-K calc-alkaline lavas) over Benioff zone depths from 120-250 km. High-K alkaline lavas above Benioff zone depths >300 km. Magmas derived mainly from mantle wedge above Beioff zone, where modified by water and/or melt from the subducted oceanic crust)

Whitford, D.J., I.A. Nicholls & S.R. Taylor (1979)- Spatial variations in the geochemistry of Quaternary lavas across the Sunda arc in Java and Bali. Contributions to Mineralogy and Petrology 70, 3, p. 341-356.
(online at: https://www.academia.edu/62507852/Spatial_variations_in_the_geochemistry_of_Quaternary_lavas_across_the_Sunda_arc_in_Java_and_Bali)
(Island arc lavas range from tholeiites to high-K calc-alkaline lavas over Benioff zone depths 120 to 250 km. More abundant calc-alkaline lavas between these extremes. High-K alkaline lavas over Benioff zone depths over 300 km. Incompatible elements increase with depth to seismic zone. Java and Bali lavas geochemistry best explained by combination of mantle source melting and partial melting of that material at progressively greater

depths. Primary tholeiitic magmas may form by 20-25% melting at 30-40 km, primary high-K calc-alkaline magmas by 5-15% melting at 40-60 km, and primary alkaline magmas by 5% melting at 80-90 km)

Whitford, D.J. & W.M. White (1981)- Neodymium isotopic composition of Quaternary island arc lavas from Indonesia. Geochimica Cosmochimica Acta 45, p. 989-995.
(143Nd/144Nd ratios in Quaternary lavas from Java and Banda arc exhibit inverse correlation with 87Sr/86Sr. Indonesian samples resemble Andean rather than island arc lavas)

Wichmann, A. (1897)- Der Ausbruch des Vulkans ´Tolo´ auf Halmahera. Zeitschrift Deutschen Geologischen Gesellschaft, Berlin, 49, p. 152-159.
(online at: https://www.biodiversitylibrary.org/item/150431#page/172/mode/1up)
('The eruption of the Tolo volcano on Halmahera'. On what is known about historic eruptions of Tolo volcano on Morotai island, off N Halmahera, specifically an eruption in the year 1550)

Wichmann, A. (1902)- Der Vulkan der Insel Una Una (Nanguna) im Busen von Tomini, Celebes. Zeitschrift Deutschen Geologischen Gesellschaft, Berlin, 54, p. 144-158.
(online at: https://www.zobodat.at/pdf/Z-dtsch-Geol-Ges_54_0144-0158.pdf)
('The volcano of Una-Una island in Tomini Bay, Sulawesi'. Erupted in 1898, with ash reaching W into E Kalimantan)

Wichmann, C.E.A. (1910)- Uber den Vulkan Soputan in der Minahassa. Zeitschrift Deutschen Geologischen Gesellschaft, Monatsberichte 62, 8, p. 589-595.
(online at: https://www.e-rara.ch/zut/content/zoom/29137020)
('On the Soputan volcano in the Minahasa', NE Sulawesi. Critique of J. Ahlburg (1910) description of Soputan eruption history on date of last major eruption (1828 or 1838), etc. First European to climb Soputan was C.G.C. Reinwardt in 1821)

Wichmann, C.E.A. (1911)- Uber die Ausbruche des Soputan in der Minahassa. Zeitschrift Deutschen Geologischen Gesellschaft, Monatsberichte 63, 4, p. 228-232.
(online at: https://www.biodiversitylibrary.org/item/182872#page/926/mode/1up)
('On the eruptions of the Soputan in the Minahasa', NE Sulawesi'. Continuation of unusually harsh critique of Ahlburg 1910 papers. Nothing new here)

Wichmann, C.E.A. (1918)- Over de vulkanen van het eiland Tidore (Molukken). Verslagen Koninklijke Akademie van Wetenschappen, Amsterdam 27, p. 1-9.
('On the volcanoes of Tidore island (Moluccas)')

Wichmann, C.E.A. (1918)- On the volcanoes in the island of Tidore island. Proc. Koninklijke Nederlandse Akademie van Wetenschappen, Amsterdam 21, p. 983-990.
(online at: https://dwc.knaw.nl/DL/publications/PU00012167.pdf)
(English version of Wichmann (1918). Tidore Island composed of several andesitic volcanic centers, the tallest Matubu ~1730m high, others ~400-800m high)

Wichmann, A. (1921)- Die Vulkane der Sangi-Inseln. Verhandelingen Koninklijke Akademie van Wetenschappen, Amsterdam (2), 22, 1, p. 3-52.
(online at: https://dspace.library.uu.nl/handle/1874/298342)
('The volcanoes of the Sangi Islands'. Active volcanoes in double arc between Molucca Sea and Celebes Sea)

Wickman, F.E. (1966)- Repose-period patterns of volcanoes. II. Eruption histories of some East Indian volcanoes. Arkiv for Mineralogi och Geologi 4, 4, p. 303-317.

Wijaya M.E.J. & L. D. Setijadji (2022)- A preliminary volcanological study of North Eastern Kaba Volcano, Bengkulu Province, Indonesia. Proc. 13th AUN/SEED-Net Reg. Conference Geological and Geo-Resource Engineering (RCGeoE 2021), IOP Conference Series: Earth and Environmental Science 1071, 012018, p. 1-10.

(online at: https://iopscience.iop.org/article/10.1088/1755-1315/1071/1/012018/pdf)
(Six geomorphological units in NE part of Kaba Volcano, Sumatra. Rocks andesites and some basalt. No mention of early work on Kaba by Von Karacson (1897))

Wille, M., O. Nebel, T. Pettke, P.Z. Vroon, S. Konig & R. Schoenberg (2018)- Molybdenum isotope variations in calc-alkaline lavas from the Banda arc, Indonesia: assessing the effect of crystal fractionation in creating isotopically heavy continental crust. Chemical Geology 485, p. 1-13.
(Samples from lavas of modern volcanoes of eastern Banda Arc show wide Mo isotope variability)

Willems, H.W.V. (1939)- Over de magmatische provincien in Nederlandsch Oost-Indien. Geologie en Mijnbouw 1, 3, p. 47-55.
(online at: https://drive.google.com/file/d/1OPkJAkiygxWc4S32mpkzBjgyUQxhm_ef/view)
('On the magmatic provinces in the Netherlands East Indies'. Not overly useful)

Willems, H.W.V. (1940)- On the magmatic provinces in the Netherlands East Indies. Verhandelingen Kon. Nederlands Geologisch Mijnbouwkundig Genootschap, Geologische Serie 12, 3, p. 289-477.
(Mainly listings of chemical analyses of 1220 volcanic rock samples)

Williams, M. (2012)- The ~73 ka Toba super-eruption and its impact: history of a debate. Quaternary International 258, p. 19-29.
(Toba volcano in N Sumatra located at intersection of two major tectonic lineaments. Caldera considered the largest Quaternary caldera on earth. Most recent explosive eruption at ~73 ka was order of magnitude larger than Tambora in 1815. Extent of the impact remains unclear)

Williams, M. (2012)- Did the 73 ka Toba super-eruption have an enduring effect? Insights from genetics, prehistoric archaeology, pollen analysis, stable isotope geochemistry, geomorphology, ice cores, and climate models. Quaternary International 269, p. 87-93.
(Still ongoing debates on potential impact of ~73 ka Toba eruption (which probably produced almost 100 times more pyroclastic ejecta than Tambora in 1815))

Williams, M.A.J., S.H. Ambrose, S. van der Kaars, C. Ruehlemann, U. Chattopadhyaya, J. Pal & P.R. Chauhan (2009)- Environmental impact of the 73 ka Toba super-eruption in South Asia. Palaeogeogr. Palaeoclim. Palaeoecology 284, p. 295-314.
(Eruption of Toba volcano in N Sumatra at 73 ka was largest explosive eruption of past 2 My and caused cooling and deforestation in S Asia. Analysis of pollen from core in Bay of Bengal with stratified Toba ash suggest eruption was followed by cooling and prolonged desiccation, reflected in decline in tree cover in India and adjacent region. Carbon isotopic composition of soil carbonates above and below ash in three sites across C India show that C3 forest was replaced by wooded to open C4 grassland)

Wilson, M. & J.P. Davidson (1984)- The relative roles of crust and upper mantle in the generation of oceanic island arc magmas. Philosophical Transactions Royal Society London, A, 310, 1514, p. 661-674.
(Oceanic island arcs should represent least complicated type of subduction related magmatism, in which contamination by continental crustal materials does not occur. However, a range of basic-intermediate lavas from Sunda-Banda arc of Indonesia and Lesser Antilles island arc have significant continental fingerprint to their isotopic compositions, etc.. Could be explained by involvement of terrigenous sediment component in genesis of slab derived fluids. or could reflect high level contamination of ascending magmas by sediments at base of island arc crust)

Wilson, N., V. Valler, M. Cassidy, M. Boyd, L. Mani & S. Bronnimann (2023)- Impact of the Tambora volcanic eruption of 1815 on islands and relevance to future sunlight-blocking catastrophes. Nature Scientific Reports 13, 3649. p. 1-13.
(online at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9985606/pdf/41598_2023_Article_30729.pdf)
(31 large islands worldwide experienced smaller climatic impacts of 1815 Tambora eruption than latitudinally equivalent continental sites)

Wing Easton, N. (1916)- Het caldeira-probleem. Verhandelingen Geologisch-Mijnbouwkundig Genootschap Nederland Kolonien, Geologische Serie 3 (Molengraaff volume), p. 65-77.
(Normal volcanic craters have diameter of several 100s of meters. Some are calderas with diameters of multiple kilometers: Old Idjen 16 km, Ringgit 21 km, Tengger, Krakatau, etc. Verbeek and Von Hochstetter favor origin as collapse features)

Wing Easton, N. (1916)- Wat wij van onze Indische vulkanen weten en niet weten. Verslagen Geologische Sectie, Geologisch-Mijnbouwkundig Genootschap 2, p. 101-106.
('What we do and do not know about our volcanoes in the Indies'. 18 December 1915 presentation in The Hague, in which he pleaded for the establishment of a permanent Volcanological Survey in the Netherlands Indies)

Wing Easton, N. with G.L.L. Kemmerling (1923)- Vulcanology. In: The history and present state of scientific research in the Dutch East Indies, Koninklijke Akademie van Wetenschappen, Amsterdam De Bussy, p. 1-11.
(online at: https://www.delpher.nl/nl/boeken/view?identifier=MMKB24:077104000:00001)
(Overview of volcano studies in Indonesia until early 1920s. No figures)

Wing Easton, N. (1929)- Volcanic science in past and present. In: L.M.R. Rutten (ed.) Science in the Netherlands Indies, Koninklijke Akademie van Wetenschappen, Amsterdam, p. 80-100.
(online at: https://resolver.kb.nl/resolve?urn=MMKB18A:026088000:pdf
(Another brief overview of volcano studies in Indonesia until 1929)

Wirakusumah, A.D. (ed.) (2012)- Gunung api, ilmu dan aplikasinya. Centre for Geological Survey, Bandung, Special Publ., p. 1-203.
('Volcanoes, science and its applications'. Collection of articles)

Wirakusumah, A.D. & R. Bacharudin (1999)- Volcanic hazard mapping in Indonesia. In: G.H. Teh (ed.) Proc. 9th Regional Congress Geology, Mineral Energy Resources of SE Asia (GEOSEA '98), Kuala Lumpur 1998, Bull. Geological Society Malaysia 43, p. 205-213.
(online at: https://gsmpubl.wordpress.com/wp-content/uploads/2014/09/bgsm1999022.pdf)
(Review of status of volcanoes hazard mapping and brief history of volcano monitoring by the Volcanological Survey of Indonesia. With example map of Semeru volcano in E Java)

Wirakusumah, A.D. & H. Rachmat (2017)- Impact of the 1815 Tambora eruption to global climate change. In: 2nd Int. Conf. Transdisciplinary research on environmental problems in Southeast Asia (TREPSEA), Bandung 2016, IOP Conference Series: Earth and Environmental Science, 71, 012007, p. 1-9.
(online at: http://iopscience.iop.org/article/10.1088/1755-1315/71/1/012007/pdf)
(April 1815 paroxysmal destructive eruption of Tambora formed caldera and emitted 60-80 megatons of SO2 to stratosphere. SO2 circled world and oxidized to form H2SO4, an aerosol limiting sunlight to reach Earth surface. 1816 was 'year without summer' in Europe, with epidemic diseases in Benggal, etc.)

Wood, G.D. (2014)- Tambora: the eruption that changed the world. Princeton University Press, p. 1-312.
(Review of 1815 eruption of Tambora volcano on Sumbawa island and its global impact)

Yokoyama, I. & Siswowidjojo Supara (1970)- Volcanological Survey of Indonesia Volcanoes, Part 5. A gravity survey on and around Batur Caldera, Bali. Bull. Earthquake Research Institute (University of Tokyo) 48, 2, p. 317-329.
(online at: https://repository.dl.itc.u-tokyo.ac.jp/record/33331/files/ji0482011.pdf)
(Quaternary Batur caldera in NE Bali) with two rims, and more recent central eruption cone Batur (1717m). 74 graviity stations recorded in 1968. Bouguer gravity anomalies increase to E (regional feature))

Zaennudin, A. (2010)- The characteristic of eruption of Indonesian active volcanoes in the last four decades. J. Lingkungan dan Bencana Geologi (JLBG) 1, 2, p. 113-129.

(online at: www.bgl.esdm.go.id/publication/index.php/dir/article_detail/287)
(Indonesia has 129 active volcanoes (~13% of world). Three types: A (79) with recorded eruptions since 1600; B (29) with solfataric and or fumarolic activity and crater; C (21) in solfataric stage, but volcanic edifice not clear)

Zelenov, K.K. (1964)- The submarine volcano Banua Wuhu, Indonesia. Institute of Technology Bandung (ITB), Contributions Department of Geology, Institute of Technology Bandung (ITB) 55, p. 19-34.
(Submarine volcano, rising >400m from sea floor in Sangihe Islands, Moluccas Sea. Erupted in 1918)

Zen, M.T. (1963)- On the roots of volcanoes. Contributions Department of Geology, Institute of Technology Bandung (ITB) 53, p. 49-72.

Zen, M.T. (1964)- The volcanic calamity in Bali in 1963. Tijdschrift Koninklijk Nederlands Aardrijkskundig Genootschap 81, p. 92-100.

Zen, M.T. (1966)- The formation of various ash flows in Indonesia. Bulletin of Volcanology (Bulletin Volcanologique) 29, 1, p. 77-78.
(Abstract and discussion from IAV Int. Symposium on Volcanology, New Zealand 1965. Important difference in mechanism of formation between ash-flow tuff sheets common on Sumatra and minor ash flows of nuee ardentes type likeMerapi and Mt Agung in Java and Bali. Sumatra 'welded tuffs' are collapsed froth flows emitted from fissures and related to emplacement of granite batholiths during orogenic uplift in Plio-Pleistocene time)

Zen, M.T. (1968)- On the possible relationship between the origin of andesitic rocks and the growth of continents. Contributions Department of Geology, Institute of Technology Bandung (ITB) 6, p. 23-41.

Zen, M.T. (1969)- The occurrence of hill swarms and wave-like undulations around some Indonesian volcanoes. Bull. of National Institute Geology and Mining (NIGM), Bandung 2, 3, p. 41-49.
(Three types of hills around Indonesian volcanoes: (1) parasitic volcanic cinder cones (Slamet, Lamongan, etc.), (2) hillocks formed by lahar deposits (e.g. Galunggung, Raung, etc.), and (3) anticlinal structures resulting from collapse of volcanic cones or squeezing of soft sediment by weight of volcano itself (N floor Ungaran, Gendol SW of Mt Merapi, N of Tangkuban Perahu, N of Arjuna, etc.))

Zen, M.T. (1972)- Geothermy and its future in Indonesia. Proceedings Institut Teknologi Bandung (ITB) 7, 1, p. 27-40.
(online at: https://journals.itb.ac.id/index.php/jmfs/article/view/9714/3689)
(At least 24 areas in Indonesia.prospective for geothermal energy. Greatest potentials along Semangko Rift Zone in Sumatra, Java, C Flores, S and N Sulawesi, Halmahera, etc. With map of volcanoes and hyperthermal fields. Areas with adequate heat sources: (1) areas with relatively shallow intrusions, (2) areas of recently extinct volcanoes, and (3) areas around active volcanoes)

Zen, M.T. & D. Hadikusumo (1964)- Preliminary report on the 1963 eruption of Mt Agung in Bali (Indonesia). Bulletin Volcanologique 27, 269-299.
(After 127 years of dormancy, Mount Agung on Bali had two major eruption in 1963, on March 17 and May 16, accompanied by nueees ardentes that killed 1500-1700 people. Subsequennt cold lahars killed 200 more)

Zielinski, G.A., P.A. Mayewski, L.D. Meeker, S. Whitlow, M. Twickler & K. Taylor (1996)- Potential atmospheric impact of the Toba mega-eruption. Geophysical Research Letters 23, 8, p. 837-840.
(~6-year long period of volcanic sulfate recorded in Greenland GISP2 ice core at ~71.1 ± 5 ka may reflect Toba mega-eruption. Deposition of these aerosols at beginning of ~1000-year long stadial event, but not immediately before longer glacial period beginning ~67.5 ka. Toba aerosols may be responsible for enhanced cooling during initial 200 yrs of ~1000-year cooling event ('volcanic winter'))

Zollinger, H. (1855)- Besteigung des Vulkanes Tambora auf der Insel Sumbawa und Schilderung der Eruption desselben im Jahre 1815. J. Wurster & Co., Winterthur, p. 1-21.
(online at: https://www.e-rara.ch/zut/doi/10.3931/e-rara-10991)

('The ascent of the Tambora volcano on Sumbawa Island and an account of its eruption in the year 1815'. Probably the first study of Tambora volcano in 1847, 32 years after its enormous eruption, by Swiss botanist and former Netherlands Indies government naturalist Heinrich Zollinger)

Zollinger, H. (1866)- Togt naar het gebergte Bator, uit Zollinger's schriftelijke nalatenschap. Bijdragen Taal Land en Volkenkunde van Nederlandsch-Indie 3, 1, p. 497-535.
(online at: https://brill.com/view/journals/bki/13/1/article-p497_39.xml)
('A trip to the Batur mountains, from Zollinger's posthous notes' Early description of area of Batur volcano complex on Bali, which at that time (August-September 1856) was very litle known. Posthumous paper by H. Zollinger, who died in 1859. Originally published in German, in Petermanns Geographische Mittheilungen, 1864. Batur Mountains with outer ring (caldera rim?) of volcanic trachyte blocks and thick tuff stone deposits. Rel. common lava flows, the most recent from 1849. Upper part of Batur rel. steep (40°). Zollinger already in lesser physical condition due to a liver disease (p. 527). No figures (see also Batur reports by Kemmerling 1917 and Stehn 1928))

Zulfakriza, Z., A.D. Nugraha, S. Widiyantoro, P.R. Cummins, D.P. Sahara, S. Rosalia, A. Priyono et al. (2020)- Tomographic imaging of the Agung-Batur Volcano Complex, Bali, Indonesia, From the ambient seismic noise field. Frontiers in Earth Science 8, 43, p. 1-11.
(online at: https://www.frontiersin.org/journals/earth-science/articles/10.3389/feart.2020.00043/full)

Zwierzycki, J. (1923)- Kilka uwag o wulkanach Archipelagu Malajskiego. Kosmos 48. Krakow, p.
('Some notes about the volcanoes of the Malay Archipelago'. In Polish)

IX.2. Quaternary Volcanism: Java (incl. Krakatau)

Abdillah & M. Abdurrachman (2023)- Interpretation of tectonic setting and magmatism for education and geotourism in Ijen Unesco Global Geopark, East Java, Indonesia Bulletin of Geology (ITB) 7, 3, p. 1248-1254.
(online at: https://buletingeologi.com/index.php/buletin-geologi/issue/view/20/PR73-4)
(Brief literature review of geology and magmatism of Late Pliocene-Quaternary Ijen Volcanic Complex, E Java)

Abdillah, H., W.A. Nugraha & F. Hakim (2021)- Study of active and fossil hydrothermal systems in Ijen caldera complex and Merubetiri Mountains, East Java. Indonesian J. of Economic Geology (IJEG) 1, 1, p. 39-48.
(online at: https://journal.iagi.or.id/index.php/IJEG/article/view/341/349)

Abdurachman, E.K., J.L Bourdier & B. Voight (2000)- Nuées ardentes of 22 November 1994 at Merapi volcano, Java, Indonesia. J. Volcanology Geothermal Research 100, p. 345-361.
(manuscript online at: https://insu.hal.science/hal-00091175/document)
((Nuées ardentes (pyroclastic flows) on 22 November 1994 at Merapi volcano traveled 6.5 km to SW and accumulated ~2.5–3 Mm^3 of deposits. Damaged area 9.5 km^2. Associated with one of several collapses of 1994 lava dome extrusion. Two nuée ardente facies: conventional "Merapi-type", valley-fill block-and-ash flow facies and pyroclastic surge facies)

Abdurahman, O., A. Zaennudin & W. Alifah S.P. (2022)- Reviewing of Kromong volcanic complex, Cirebon Regency and its resource as geological heritage. Proc. 51st Annual Conv. Indonesian Association Geologists (IAGI), Makassar, p. 1-6.
(online at: https://www.iagi.or.id/web/digital/71/PITIAGI-22-P-Abs-165.pdf)
(Volcanic rocks exposed in Arjawinangun to Jagapura Lor and domes/hills around Kromong, all referred to as the "Kromong Complex" (SW of Cirebon and N of Ciremai volcano). These are remnants of paleo-volcano including andesitic lava domes, lava flows, and andesite intrusions, possibly as old as Eocene and related to volcanic deposits of subsurface Jatibarang Fm. Associated with Miocene Kromong Limestone (E-M Miocene?; Praptisih et al., 2012), but no known contact metamorphism)

Abdurrachman, M. (2012)- Geology and petrology of Quaternary volcano and genetic relationship of volcanic rocks from the Triangular Volcanic Complex around Bandung Basin, West Java, Indonesia. Doctoral Thesis, Akita University, Japan, p. 1-131.

Abdurrachman, M., E. Suparka, R. Chrysant, H. Handley, D.P. Adli & J.N. Indriyanto (2017)- Subducted components and lithospheric contributions to arc magmatism in Java: insight from the distribution of major and trace elements of Quaternary volcanic rocks. Proc. Joint Convention HAGI-IAGI-IAFMI-IATMI (JCM 2017), Malang, p. 1-4. *(online at: https://www.iagi.or.id/web/digital/5/2017_IAGI_Malang_Subducted-Components-and-Lithospheric.pdf)*
(Major and trace elements of Papandayan and Merapi volcanoes significantly above other Java volcanoes of similar depth above Wadati-Benioff zone)

Abdurrachman, M., S. Widiyantoro, B. Priadi & T. Ismail (2017)- Geochemistry and seismic tomogram beneath Krakatoa volcano, Sunda Strait, Indonesia. Proc. Joint Convention HAGI-IAGI-IAFMI-IATMI, Malang (JCM 2017), p. 1-3.
(online at: https://www.iagi.or.id/web/digital/5/2017_IAGI_Malang_Geochemistry-and-Seismic-Tomogram.pdf)
(S-wave tomographic image and geochemical data of Krakatoa area lavas suggests subducted slab intruded by hot material of mantle upwelling. Partial melting of mantle wedge and mantle upwelling in upper mantle may be caused by thinning and possible tearing of subducted slab under Krakatoa Volcano)

Abdurrachman, M., S. Widiyantoro, B. Priadi & T. Ismail, (2018)- Geochemistry and structure of Krakatoa Volcano in the Sunda Strait, Indonesia. Geosciences (MDPI), 8, 4, 111, p. 1-10.

(online at: https://www.mdpi.com/2076-3263/8/4/111)
(Krakatoa Volcano eruptive products of 1883and later present volcanic rocks derived from partial melting of mantle wedge and mantle upwelling beneath volcano. Mante upwelling may be controlled by thinning in subducted slab as depicted by S-wave tomogram, due to strong slab pull in E part of Sunda Arc. May also be related to change in subduction style between Sumatra and Java)

Abdurrachman, M. & M. Yamamoto (2011)- Geochemistry of Papandayan and Cikuray volcanoes: mapping the extent of Gondwana continental fragment beneath Java, Indonesia. American Geophysical Union (GSA), Fall Meeting 2011, Abstract V43C-2599, 1p. *(Poster presentation)*
(Geochemistry of contiguous volcanoes Papandayan (medium-K basaltic andesite (Early Stage), andesite (Middle Stage) and dacite (Late Stage); high 87Sr/86Sr) and Cikuray (low-K, low 87Sr/86Sr, etc.) suggests mixing of low-K Cikuray-type magma with Gondwanan continental fragment material (Pre-Cambrian-Devonian Australian granites) at Papandayan. Two volcanoes reflect change in underlying basement type in West Java: Sunda Land in N, Gondwana continent fragment in S. Papandayan volcano probably only Quaternary volcano underlain by Gondwana continental fragment)

Abdurrachman, M. & M. Yamamoto (2012)- Geochemical variation of Quaternary volcanic rocks in Papandayan area, West Java, Indonesia: a role of crustal component. Proc. 12th Regional Congress Geology Mineral Energy Resources of SE Asia (GEOSEA 2010), Bangkok, J. Geological Society Thailand, Special Issue, p. 40-57.
(online at: https://www.researchgate.net/publication/291973522_Geochemical_variation_of_Quaternary_volcanic_rocks_in_Papandayan_area_West_Java_Indonesia_A_role_of_crustal_component)
(Papandayan and adjacent Cikuray volcanoes S of Bandung, W Java. Rel. high K2O and isotopic ratios of Papandayan magmas due to contamination from underlying Gondwana continental fragment)

Abdurrachman, M. & M. Yamamoto (2023)- Crustal contamination versus subducted components: an example from the West Java Arc, Indonesia and its implications in magma genesis. Indonesian J. on Geoscience (IJOG) 10, 1, p. 97-107.
(online at: https://ijog.geologi.esdm.go.id/index.php/IJOG/article/view/460)
(New Sr isotope and K2O data from Papandayan and Cikuray Volcanoes in W Java help constrain crustal assimilation and subducted input of crustal material in magma genesis beneath W Java Arc. No systematic across arc variation of K2O and Sr isotopic ratios in W Java; variations in magma chemistry attributed to crustal assimilation and involvement of subducted sediments and slab fluids from altered oceanic crust)

Abdurrachman, M., M. Yamamoto, E. Suparka, I.G.B.E. Sucipta, I.A. Kurniawan & R.F. Hasibuan (2015)- Across arc variation of strontium isotope and K2O composition in the Quaternary volcanic rocks from West Java: Evidence for crustal assimilation and the involvement of subducted components. Proc. Joint Convention HAGI-IAGI-IAFMI-IATMI, Balikpapan 2015, JCB2015-138p. 1-5.
(online at: https://www.iagi.or.id/web/digital/3/2015_IAGI_Balikpapan_Across-arc-variation.pdf)
(Increasing K2O and decreasing of 87Sr/86Sr ratios with distance from trench have been found in NE Japan Arc, but more variablity in W Java Arc, where across arc variations of magma chemistry can be explained by crustal assimilation and involvement of subducted components

Abdurrachman, M., M. Yamamoto, E. Suparka, Y.S. Yuwono & B. Sapiie (2012)- Sr-Nd isotopic study of Papandayan area, West Java: a window into the past magmatism and tectonic event. Proc. 41st Annual Conv. Indonesian Association Geologists (IAGI), Yogyakarta, 2012-GD-31, p. 1-7. *(online at: https://www.iagi.or.id/web/digital/9/2012_IAGI_Yogyakarta_Sr-Nd-Isotopic-Study-of-Papandayan-Area.pdf)*
(Sr-Nd isotopic ratios of young volcanics of Papandayan and Cikuray (to E) volcanoes, located at Cretaceous suture zone. Papandayan comprises medium-K series with high 87Sr/ 86Sr and low 143Nd/ 144Nd; Cikuray volcanics low-K series, with low 87Sr/86Sr and high 143Nd/144Nd ratios. Contrasting isotopic ratios explained by mixing of mantle wedge with Australian granites at Papandayan, perhaps parts of sudducted 'Argoland')

Adikusuma, R., D.N. Sahdarani, F.M.H Sihombing, Supriyanto & G.T.M Kadja (2020)- Petrology and petrogenesis of igneous rock in Mount Endut, Banten Province. In: Life and Environmental Sciences

Academics Forum, Depok 2019, IOP Conference Series: Earth and Environmental Science 538, 1, 012026, p. 1-8.
(online at: https://iopscience.iop.org/article/10.1088/1755-1315/538/1/012026/pdf)
(Quaternary Mt Endut volcano in E part of Banten Province. Three types of igneous rocks, andesite porphyry, diorite porphyry, and dacite porphyry. Calcalkaline magma series, in island arc or continental margin)

Adimedha, T.B., R.C. Ciputra, I. Rosianna, I.G. Sukadana, A. Harijoko, E. Handini et al. (2024)- Characteristics and genesis of Mount Pengki: a scoria cone of Dago Volcano, West Java, Indonesia. Eksplorium 45, 2, p. 57-66.
(online at: https://ejournal.brin.go.id/eksplorium/article/view/11258/8813)
(Dago volcano was Late Miocene volcano SW of Jakarta in W Java, overlying Miocene sediments of Rengganis and Bojongmanik Fms. Mount Pengki youngest product of Dago Volcano; interpreted as flank eruption product)

Adimetha, T.B., A. Harijoko, E. Handini, I.G. Sukadana, H. Syaeful, R.C. Ciputra, I. Rosiana et al. (2023)- Magmatic evolution of Dago Volcano, West Java, Indonesia. Eksplorium 44, 1, p. 13-24.
(online at: https://ejournal.brin.go.id/eksplorium/article/view/8158/6255)
(Late Miocene (~6 Ma) Dago volcano remnants SW of Jakarta (SW of Serpong) with two eruption centers. Mainly basaltic andesite- trachyandesite)

Agangi, A. & S.M. Reddy (2016)- Open-system behaviour of magmatic fluid phase and transport of copper in arc magmas at Krakatau and Batur volcanoes, Indonesia. J. Volcanology Geothermal Research 327, p. 669-686.
(manuscript online at: https://espace.curtin.edu.au/bitstream/handle/20.500.11937/10368/246119.pdf)
(Study of base metal distribution in sulfide and silicate melts at Krakatau and Batur indicates that Cu was separated during two stages of sulfide formation)

Akkersdijk, M.E. (1928)- Het Tengger caldera probleem. De Mijningenieur 9, p. 117-124.
('The Tengger caldera problem", East Java)

Akkersdijk, M.E. (1929)- Caldera of the Tengger-Mountain. Fourth Pacific Science Congress, Java 1929, Excursion Guide E 2, p. 1-12.

Akkersdijk, M.E. & R.W. van Bemmelen (1941)- Volcanic phenomena during the months of October, November and December 1939. Bull. Netherlands Indies Volcanological Survey, Bandung, 90, p. 55-71.

Alfianti, H., P. Bani, M. Sumaryadi, S. Primulyana, M. Marlia, U.B. Saing, N. Haerani & H. Gunawan (2022)- Bromo activity over the last decade: consistent passive degassing and source magma evolution. Geoscience Letters 9, 15, p. 1-9.
(online at: https://geoscienceletters.springeropen.com/track/pdf/10.1186/s40562-022-00221-2.pdf)
(Over past decade, Bromo released 0.7 Tg of SO2 into atmosphere (3% of volcanic degassing budget of Indonesia and 0.3% of global volcanic SO2 emission budget outside eruptive periods). Activity sustained by basaltic-andesite to basalt trachy-andesite magma source, transitional from medium-K to high-K composition)

Alfin, A S., H.E. Wibowo & A. Harijoko (2022)- Morphometric characteristic and distribution of hummocky hills in debris avalanche deposit of Galunggung Volcano, West Java, Indonesia. Proc. 13th AUN/SEED-Net Regional Conference Geological and Geo-Resource Engineering (RCGEOE), Yogyakarta 2021, IOP Conference Series: Earth and Environmental Science 1071, 012012, p. 1-10.
(online at: https://iopscience.iop.org/article/10.1088/1755-1315/1071/1/012012/pdf)
(Statistics on block sizes of volcano collapse deposits in the ~32 km^2 block field at SE side of Galunggung volcano. Hummocky hills 500-700,000 m2 in size, distributed 0.5-20 km from summit of volcano. No mentions of age of collapse and of original work on this Tasikamalaya block field by Escher (1925))

Alloway, B.V., S. Andreastuti, R. Setiawan, J. Miksic & Q. Hua (2017)- Archaeological implications of a widespread 13th century tephra marker across the central Indonesian Archipelago. Quaternary Science Reviews 155, p. 86-89.
(Widespread mid-13th century tephra identified across central Indonesia, can be correlated to eruption of Samalas volcano (near Rinjani, Lombok) in 1257 A.D. No archeological evidence yet indicating catastrophic disruption in mid-13th Century Indonesia)

Alves, S., P. Schiano & C.J. Allegre (1999)- Rhenium-Osmium isotopic investigation of Java subduction zone lavas. Earth Planetary Science Letters 168, p. 65-77.
(Java arc lavas low in Osmium. Mixing between unradiogenic Os from peridotitic upper mantle and two different radiogenic Os components, reflecting two crustal contaminants or different proportions of subducted oceanic crust and sediments)

Alzwar M, (1985)- Gunung Kelut. Berita Berkala Vulkanologi, Special Edition 108, Direktorat Vulkanologi, (Volcanological Survey of Indonesia), Bandung, p. 1-60.
(Monograph on Kelud active volcano, East Java)

Alzwar, R., M. Kamid, A.J.T. Sihombing & Y.S.H. Simatupang (1983)- Magma types and peculiarity of the 1883 Krakatau eruption, Sunda Strait, Indonesia. Symposium Centennial Commemoration Krakatau eruption, LIPI, Jakarta 1983, p. 1-21.

Anderson, T. (1914)- The volcanoes Bromo and Krakatau: a brief account of a visit to them. Alpine Journal 28 (204), p. 178-182.
(Report on journey to Bromo and Krakatau by British eye surgeon and well-known amateur volcanologist Dr. Tempest Anderson in 1913, in the company of Geological survey geologist H.A. Brouwer, during Anderson's final voyage to Indonesia and the Philippines in 1913. On return journey home he died of illness on ship in Red Sea, and was buried at Suez, Egypt)

Andreastuti S.D. (1999)- Stratigraphy and geochemistry of Merapi Volcano, Central Java, Indonesia: implication for assessment of volcanic hazards. Ph.D. Thesis, University of Auckland, New Zealand, p. 1-910.
(Study of tephra deposits on flanks of Merapi showed 20 formations, two of which products of Merbabu. Oldest unit Sumber (~3000 yrs) and youngest Pasarbubar (~1800 AD?). Magma evolved from medium-K to high-K with time. Post-1800 AD eruptions mainly of open vent type, related to dome collapse events. Pre-1800 AD eruptions mainly controlled by deeper magmatic processes, with hornblende more abundant)

Andreastuti, S.D. (2007)- The 2006 eruption of Merapi, petrography and geochemistry of the June 14, 2006 pyroclastic flows. Proc. Joint Convention 32nd HAGI, 36th IAGI and 29th IATMI, Bali 2007, p. 662-668.
(Pyroclastic flows generated during collapse of lava dome in 2006. Collapse of part of older dome added common older lithic blocks to pyroclastic flow deposits. SiO2 content 55.5-55.9 wt %)

Andreastuti, S.D., B.V. Alloway & I.E.M. Smith (2000)- A detailed tephrostratigraphic framework at Merapi volcano, Central Java, Indonesia: implications for eruption predictions and hazard assessment. J. Volcanology Geothermal Research 100, p. 51-67. *(online at: https://www.researchgate.net/publication/223612451_A_detailed_tephrostratigraphic_framework_at_Merapi_Volcano_Central_Java_Indonesia_Implications_for_eruption_predictions_and_hazard_assessment)*
(Merapi Volcano episodes of dome growth usually resulted in partial dome collapse events that generated pyroclastic flows. Eruptive record back to mid-Holocene, deduced from volcaniclastic fans of lower flanks, show most eruptions from 3000-250 years ago of different style from present period. Numerous coarse ash and lapilli beds interbedded with soil material, pyroclastic flow and surge deposits. In deeper parts of succession pyroclastic products from adjacent Merbabu Volcano, evidence of concurrent activity at both volcanoes)

Angkasa, S.S. (2019)- Geology, mineralogy, and sulfur isotopic studies of proximal volcanic products at the Tangkuban Parahu Volcano, Indonesia. Doct. Thesis, Akita University, p. 1-81.

(online at: https://air.repo.nii.ac.jp/?action=repository_action_common_download&item_id=3845&item_no=1&attribute_id=46&file_no=2)
(Proximal volcanic succession of Tangkuban Perahu volcano near Bandung mainly composed of fine-clay and coarse ash, lapilli tuff, and pyroclastic breccia within 10 tephra units)

Angkasa, S.S., T. Ohba, T. Imura, I. Setiawan & M. Rosana (2019)- Tephra-stratigraphy and ash componentry studies of proximal volcanic products at Mount Tangkuban Parahu, Indonesia: an insight to Holocene volcanic activity. Indonesian J. on Geoscience (IJOG) 6, 3, p. 235-253.
(online at: http://ijog.bgl.esdm.go.id/index.php/IJOG/article/view/590/289)

Ardian, D.N., H. Darmawan, Wahyudi, B.W. Mutaqin, Suratman, N. Haerani & Wikanti (2022)- Grain size, mineralogical, and geochemistry of the 1996-2018 volcanic products of Anak Krakatau Volcano, Indonesia. Proc. 13th AUN/SEED-Net Reg. Conf. Geological and Geo-Resource Engineering (RCGeoE 2021; online), IOP Conference Series: Earth and Environmental Science 1071, 012017, p. 1-11.
(online at: https://iopscience.iop.org/article/10.1088/1755-1315/1071/1/012017/pdf)
(Anak Krakatau post-1996 products shows eruption type strombolian to vulcanian. Pyroclastic falls and flows. Lava is basaltic andesite)

Asmoro, P., D. Wahyudin & E. Mulyadi (1989)- Geological map of Papandayan volcano, Garut, West Java. Direktorat Vulkanologi (Volcanological Survey of Indonesia), Bandung.

Assiddiqy, M.H., R. Gati, B. Sibarani & Suryantini (2021)- Volcanostratigraphy study of Slamet volcano and the implication to its early stage of geothermal exploration. Proc. ITB Int. Geothermal Workshop, Bandung 2020, IOP Conference Series: Earth and Environmental Science, 732, 012009, p. 1-7.
(online at: https://iopscience.iop.org/article/10.1088/1755-1315/732/1/012009/pdf)
(Eight volcanostratigraphic units identified in Quaternary Slamet Volcanic Complex area and its surroundings. Two main phases of volcanism, Old Slamet and New Slamet)

Baak, J.A. (1943)- A comparative study on recent ashes of some Java volcanoes. Chuo Noozi Sikenzyoo, Contribution 4, p. 1-57.
(Distributution of ashes from Semeru. Kelut and Merapi, and chemical analyses of ash samples. Published during the Japanese occupation in Bogor, in the Japanese year 2603 (1943?). Probably same as Baak (1949), below)

Baak, J.A. (1949)- A comparative study on recent ashes of the Java volcanoes Smeru, Kelut, and Merapi. Mededelingen Algemeen Proefstation Landbouw, Buitenzorg (Bogor), 83, p. 1-60.

Bahar, I. (1984)- Contribution a la connaissance du volcanisme indonesien: le Merapi (Centre Java), cadre structural, petrologie, geochimie et implications volcanologiques. Ph.D. Thesis Universite de Montpellier, p. 1-213. *(Unpublished)*
('Contribution to the knowledge of Indonesian volcanism: the Merapi (C Java), structural setting, petrology, geochemistry and volcanological implications')

Banggur, F.S., M.Z. Tuakia, M. Abdurrachman, M.N Kartadinata, A.E.P. Muhammad, F. Novico & C. Patria (2025)- Volcanostratigraphy and geological hazard potential of the Karaha-Sadakeling Volcano Complex, West Java, Indonesia. J. Riset Geologi dan Pertambangan (BRIN) 35, 2, p. 1-22.
(online at: https://jrisetgeotam.brin.go.id/index.php/jrisgeotam/article/view/1397/pdf_1)
(Karaha-Sadakeling Volcanic Complex in Tasikmalaya Regency, W Java, characterized by ridge of hills extending north from Mount Galunggung (with Karaha and Talagabodas geothermal systems). Evolution from old to young: Cakrabuana, Sadakeling, Ewaranda and Talagabodas. N-S oriented volcanic cone morphology parallels major fault between Cakrabuana Complex to NE and Karaha-Sadakeling Complex)

Barber, N.D. S.L. Baldwin, M. Edmonds, F.O. Boschetty, H.E. Wibowo & A. Harijoko (2023)- Monogenetic volcanoes as windows into transcrustal mush: A case study of Slamet and Loyang volcanoes, Central Java. J. Volcanology Geothermal Research 444, 107945, p. 1-18.
(online at: https://www.sciencedirect.com/science/article/pii/S0377027323002020)
(Basaltic lava samples from Gunung Slamet in C Java and its most distal scoria cone, Gunung Loyang. Slamet is composed of calc-alkaline basalts. Olivines in both volcanoes cluster in five groups, defined by presence or lack of zoning, resorption, etc.. Loyang olivines from similar petrological system as Slamet, but from deeper mid-crustal levels (12 km), and more mafic source. Monogenetic volcanoes like Loyang can be used as "petrological windows" into deeper crustal levels of mush reservoirs at composite stratovolcanoes)

Bardintzeff, J.M. (1984)- Merapi volcano (Java, Indonesia) and Merapi-type nuee ardente. Bulletin of Volcanology (Bulletin Volcanologique) 47, 3, p. 433-446.

Beauducel, F. (1998)- Structures et comportement mecanique du volcan Merapi (Java): une approche methodologique du champ de deformations. Doct. Thesis Universite de Paris 7, p. 1-243.
(online at: www.ipgp.jussieu.fr/~beaudu/download/ecrit.pdf)
('Structures and mechanical behaviour of the Merapi volcano (Java)'.)

Beauducel, F., F.H. Cornet, E. Suhanto, T. Duquesnoy & M. Kasser (2000)- Constraints on magma flux from displacements data at Merapi volcano, Java Indonesia. J. of Geophysical Research: Solid Earth 105, B4, p. 8193-8203.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/pdf/10.1029/1999JB900368)

Belousov, A., M. Belousova, D. Krimer, F. Costa, O. Prambada & A. Zaennudin (2015)- Volcaniclastic stratigraphy of Gede Volcano, West Java, Indonesia: how it erupted and when. J. Volcanology Geothermal Research 301, p. 238-252.
(online at: http://repo.kscnet.ru/2221/1/gede-paper.pdf)
(Holocene volcaniclastic deposits. Major part of volcanic edifice of Gede Volcano, 60 km S of Jakarta, formed in Pleistocene with high-silica basalts. After inactive period of >30,000 years volcanic activity resumed at Pleistocene- Holocene boundary, with explosive basaltic andesite to rhyodacites. Four major Holocene eruptive episodes ~10,000, 4000, 1200, and 1000 yr BP. Most of erupted products transported as pyroclastic flows. Voluminous lahars common between eruptions. Recent eruptive period of volcano started ~800 years ago with frequent, weak explosive Vulcanian-type eruptions and rare small extrusions of viscous lava)

Belyanin, P.S. (2021)- The landscape structure of the Gede-Pangrango stratovolcano (West Java, Indonesia). Geography and Natural Resources 42, 4, p. 395-401.
(online at: www.researchgate.net/publication/359345447_The_Landscape_Structure_of_the_Gede Etc.)
(Review of geomorphology and plant communities of ~3000m high Gede-Panggrango volcano complex (G-P is not even close to being the highest volcano on Java, as stated by this author; JTvG))

Berlo, K., V.J. van Hinsberg, Suparjan, B.H. Purwanto & H. Gunawan (2014)- Using the composition of fluid seepage from the magmatic-hydrothermal system of Kawah Ijen volcano, Indonesia, as a monitoring tool. J. Volcanology Geothermal Research 399, 106899, p. 1-11.
(open manuscript at: https://www.sciencedirect.com/science/article/abs/pii/S0377027319306353)
(On lake waters of Kawah Ijen volcano, with concentrated hyperacidic brines from volcanic gases and water-rock interaction. Lake water and hydrothermal fluids seep through W flank of volcano where they precipitate gypsum and form hyperacid Banyu Pahit river)

Berlo, K., V.J. van Hinsberg, N. Vigouroux, J.E. Gagnon & A.E. Williams-Jones (2014)- Sulfide breakdown controls metal signature in volcanic gas at Kawah Ijen volcano, Indonesia. Chemical Geology 371, p. 115-127.
(Deep (>200 MPa) basalt-hosted melt inclusions at Kawah Ijen volcano track progressive decomposition of sulfide liquid upon magma ascent and degassing. Sulfide liquid is important, and for most metals their dominant reservoir, and its breakdown therefore leads to strong increase in metal concentrations in melt)

Bernard, O., C. Bouvet de Maisonneuve, L. Arbaret, K. Nagashima, J. Oalmann, A. Prabowo & A. Ratdomopurbo (2022)- Varying processes, similar results: How composition influences fragmentation and subsequent feeding of large pyroclastic density currents. Frontiers in Earth Science 10, 979210, p. 1-21.
(online at: https://www.frontiersin.org/articles/10.3389/feart.2022.979210/full)
(Large mafic Plinian eruptions sometimes generate ignimbrites. Study includes analyses of andesite of Merapi, Java, and Gunungkawi ignimbrite, Batur, Bali)

Berthommier, P.C. (1990)- Etude volcanologique du Merapi (Centre-Java). Tephrostratigraphie et chronologie. Produits eruptifs. Ph.D. Thesis, Universite Blaise Pascal, Clermont-Ferrand, France, p. 1-216.
('Volcanological study of the Merapi (Central Java). Tephrostratigraphy and chronology. Eruptive products.' Merapi arc volcano rests on remains of ancient basement (Pre-merapi, >400,000 years old). Current Merapi very young, rapidly building volcano. Four units: (1) Old Merapi (>60,000- 8,000 yrs old); (2) Middle Merapi (8000- 2000 yrs) (3) Recent Merapi (2000 - 600 ys); (4) Historic Merapi (continuous extrusion of andesite in form of domes and destruction of these domes generating fiery clouds; most recent in 1984). Three processes in magmatic evolution of Merapi lavas: fractional crystallization in shallow reservoir; continuous injection of more basic magma into reservoir, etc.)

Berthommier, P.C., G. Camus, M. Condomines & P.M. Vincent (1990)- Le Merapi (centre Java): elements de chronologie d'un stratovolcan andesitique. Comptes Rendus Academie Sciences, Paris, 311, 1, p. 213-218.
('Merapi, central Java: elements of chronology of an andesitic stratovolcano')

Blanke, W. (1939)- Vulkaan-ruines bij Plered. De Tropische Natuur 28, p. 114-117.
(online at: https://natuurtijdschriften.nl/pub/511497/TN1939028007002.pdf)
('Volcano ruins near Plered'. Brief description of ruins of large extinct volcano complex with about a dozen steep remants of intrusive feeder pipes between Jakarta and Bandung, W Java. Largest peaks Gunung Bongkok and G. Parang. The latter is elongate with three peaks, presumably representing three crater feeder pipes. At W side of G. Parang still remnants of old, uneconomic gold mine entrance, operated by VOC around 1722-1742)

Blattmann, S. (1938)- Basaltisch-andesitische Gesteine des Salak-Gebirges in West Java. Neues Jahrbuch Mineralogie Geologie Palaontologie, Beilage Band 73, Abhandlungen A, 3, p. 352-374.
('Basaltic-andesitic rocks of the Salak mountains in West Java')

Blume, C.L. (1832)- Vulkane auf Java. Annalen Erd Volker- und Staatenkunde ('Berghaus Annalen') 6, p. 400.
('Volcanoes on Java'. Brief note on 40 volcanoes and mud eruptions in Java, by German health officer and pioneering botanist-naturalist of Java, Carl Ludwig Blume)

Blumenthal, M.M. (1927)- Der Klut (Ost-Java), sein Eruptions- und Katastrophentypus und die getroffenen Praventivmassnahmen. Jahresbericht Naturforschenden Gesellschaft Graubunden, Year 1926/27, 65, p. 29-59.
(online at: https://www.e-periodica.ch/digbib/view?pid=ngg-002:1926:65#6)
('The Kelud (East Java), its eruption and catastrophe-type and the preventive measures taken'. See also work by Kemmerling (1921))

Bogie, I., Y.I. Kusumah & M.C. Wisnandary (2008)- Overview of the Wayang Windu geothermal field, West Java, Indonesia. Geothermics 37, 3, p. 347-365.
(Wayang Windu geothermal field 35 km S of Bandung, associated with Gambung, Wayang, Windu Pleistocene volcanic centers)

Bogie, I. & K.M. MacKenzie (1998)- The application of volcanic facies models to an andesitic stratovolcano hosted geothermal system at Wayang Windu, Java, Indonesia. Proc. 20th New Zealand Geothermal Workshop, Auckland 1998, p. 265-276.
(online at: https://www.researchgate.net/publication/283056119_The_application_of_a_volcanic_facies_model_to_an_andesitic_stratovolcano_hosted_geothermal_system_at_Wayang_Windu_Java_Indonesia)
('Volcanic facies model' of Wayang Windu geothermal project 40 km S of Bandung, W Java, at S slope of active Malabar volcano. Wayang Windu is one of three small Pleistocene (0.10- 0.49 Ma) eruptive centers)

Boomgaart, L. (1947)- Some data on the Muriah volcano (Java), and its leucite-bearing rocks. Proc. Koninklijke Nederlandse Akademie van Wetenschappen, Amsterdam, 50, 6, p. 649-652.
(online at: https://dwc.knaw.nl/DL/publications/PU00018361.pdf)
(Brief survey of Muriah volcano complex, NE Java. N slope built up mainly of breccias of leucite-bearing rock fragments with intercaled basaltic and leucitite flows. Columnar leucite tephrite on E side of N slope)

Borisova, A.Y., A.A. Gurenko, C. Martel, K. Kouzmanov & S. Sumarti (2016)- Oxygen isotope heterogeneity of arc magma recorded in plagioclase from the 2010 Merapi eruption (Central Java, Indonesia). Geochimica Cosmochimica Acta 190, p. 13-34.

Bosch, C.J. (1858)- Uitbarstingen der vulkanen Idjin en Raun (Banjoewangi). Tijdschrift Indische Taal Land en Volkenkunde 7, p. 265-286. *(online at: https://kitlv-docs.library.leiden.edu/open/Metamorfoze/TBG/MMKITLV01_PDF_TS2332_1858_07.pdf)*
('Eruptions of the volcanoes Ijen and Raung (Banywangi)', East Java. Brief descriptions of the Ijen volcano eruption in 1817 and Raun around 1638, two in the 1700s and one around 1815.No figures)

Boudon, G., G. Camus, A. Gourgaud & J. Lajoie (1993)- The 1984 nuee-ardente deposits of Merapi volcano, Central Java, Indonesia: stratigraphy, textural characteristics and transport mechanisms. Bulletin of Volcanology 55, 5, p. 327-342.
(For many centuries Merapi volcano generated hot avalanches with mix of large blocks, lapilli and ashes, derived from destruction of partially solidified, viscous lava domes (Merapi-type nuees ardentes). On 15 June 1984, at least four nuees ardentes traveled down SW slope of Merapi; the first travelled 7 km from crater, leaving 2.7 m-thick deposit at 4 km from crater (near upper depositional limit), increasing to thickness of 12 m at front of deposit. Lower contact is sharp, non-erosive. Deposits 50% ash, 33% lapilli, 17% blocks)

Bourdier, J.L. & E. K. Abdurachman (2001)- Decoupling of small-volume pyroclastic flows and related hazards at Merapi volcano, Indonesia. Bulletin of Volcanology 63, p. 309-325.
(manuscript online at: https://insu.hal.science/hal-00089708/document)
(About large-scale detachment of an ash-cloud surge component from 'normal' Merapi-type basal block-and-ash flow pyroclastic ash flow following lava dome collapses during November 1994 eruptions at Merapi volcano, C Java)

Bourdier, J.L., I. Pratomo, J.C. Thouret, G. Boudon & P.M. Vincent (1997)- Observations, stratigraphy and eruptive processes of the 1990 eruption of Kelut volcano, Indonesia. J. Volcanology Geothermal Research 79, p. 181-203.

Bourdier, J.L., J.C. Thouret, l. Pratomo, P.M. Vincent & G. Boudon (1997)- Menaces volcaniques au Kelut (Java, Indonesie): les enseignements de l'eruption de 1990. Comptes Rendus Academie Sciences, Paris, ser. IIa, 324, 12, p. 961-968.
(online at: https://www.researchgate.net/publication/291815459_Volcanic_hazards_at_Kelut_volcano_Java_island_Indonesia_Lessons_learned_from_the_1990_eruption)
('Volcanic hazards at Kelut volcano (Java island, Indonesia): lessons learned from the 1990 eruption')

Bronto, S. (1982)- Geologi G. Galunggung. Proc. 11th Annual Conv. Indonesian Association Geologists (IAGI), Jakarta, p. 7-18.
(online at: https://www.iagi.or.id/web/digital/35/PIT-IAGI-1982-Paper-2.pdf)
('Geology of Mount Galunggung'. Active volcano NW of Tasikmalaya, W Java)

Bronto, S. (1989)- Volcanic geology of Galunggung, West Java, Indonesia. Ph.D. Thesis University of Canterbury, New Zealand, p. 1-490.
(online at: http://ir.canterbury.ac.nz/bitstream/10092/5667/1/bronto_thesis.pdf)

(Study of active Galunggung volcano, 100km SE of Bandung, W Java. Age of 'Old Galunggung' stratovolcano rocks mainly pyroclastic flows, pyroclastic fall and lahar deposits and lava flows, ~50ka- 10ka old. Younger formations erupted during caldera formation (4200 ±150 yrs BP) and in 1822, 1894, 1918, 1982-83)

Bronto, S. (1990)- Galunggung 1982-83 high-Mg basalt: Quaternary Indonesian arc primary magma. Proc. 19th Annual Conv. Indonesian Association Geologists (IAGI), Bandung, 2, p. 126-143.
(1982-1983 eruption of Galunggung volcano, W Java, began with Peleean activity, followed by Vulcanian and Strombolian eruptions, ending with extrusion of lava. Lava composition more basic with time. Rel.' primitive' high-Mg basalts probably derived from spinel peridotite source by 15% melting at ~45km depth)

Bronto, S. (1990)- G. Krakatau. Berita Berkala Vulkanologi, Edisi Khusus No. 133. Direktorat Vulkanologi, Bandung, p. 1-5.

Bronto, S., P. Asmoro, G. Hartono & Sulistiyono (2012)- Evolution of Rajabasa volcano in Kalianda area and its vicinity. Jurnal Geologi Indonesia 7, 1, p. 11-25.
(online at: www.bgl.esdm.go.id/publication/index.php/dir/article_detail/363
(Quaternary Rajabasa volcano in Lampung, SE tip of Sumatra formed in 25 km wide Pre-Rajabasa Caldera)

Bronto, S. & & S. Mulyaningsih (2007)- Gunung api maar di semenanjung Muria. Jurnal Geologi Indonesia (Indonesian J. on Geoscience; IJOG) 2, 1, p. 43-54
(online at: https://ijog.geologi.esdm.go.id/index.php/IJOG/article/view/27/27)
('Maar volcanoes on the Muria Peninsula'. Three 'maars' (volcano lakes) identified on Muria Peninsula, C Java: Bambang, Gunungrowo, and Gembong. Formed by single volcanic eruptions due to interaction between magma source, groundwater and calcareous basement rocks, producing very high gas and steam pressure, causing phreatic explosions, and ending with lava extrusion. Satellite image show12 additional circular features surrounding Muria volcano)

Bronto S., T. Situmorang & W. Effendi (1986)- Geologic map of Lamongan volcano, Lumajang, East Java. Volcanological Survey of Indonesia, Bandung, 1:50,000.
(Lamongan in E Java unique volcano with 3 main craters, 61 cinder cones and 29 maar (ranu) lakes)

Bronto S., A. Zaennudin & R.D.Erfan (1985)- Geologic map of Arjuno-Welirang volcanoes, East Java. Volcanological Survey of Indonesia, Bandung, 1:70,000.

Brouwer, H.A. (1913)- Leucite-rocks of the Ringgit (East-Java) and their contact metamorphosis. Proc. Koninklijke Nederlandse Akademie van Wetenschappen, Amsterdam, 15, 2, p. 1238-1245.
(online at: https://dwc.knaw.nl/DL/publications/PU00013056.pdf)
(Ultra-potassic leucite-bearing volcanic rocks from active Ringgit volcano, E Java, S of Madura Straits))

Brouwer, H.A. (1913)- Over een verhoogde werking van de Tangkoeban Prahoe in Juli 1913. Tijdschrift Koninklijk Nederlands Aardrijkskundig Genootschap (II), 30, p. 782-785.
(online at: https://resolver.kb.nl/resolve?urn=MMUBA13:001659001:pdf)
('About increased activity of the Tangkuban Prahu in July 1913'. Minor rumblings on 9 July 1913)

Brouwer, H.A. (1913)- Over een bezoek aan Krakatau in Mei 1913. Tijdschrift Koninklijk Nederlands Aardrijkskundig Genootschap (II), 30, p. 657-.
(online at: https://resolver.kb.nl/resolve?urn=MMUBA13:001659001:pdf)
('About a visit to Krakatau in May 1913'. Brief not about visit to Krakatau in early May 1913, with American volcanologist Dr. Tempest Anderson.No notable changes since topographic survey of 1908)

Brouwer, H.A. (1913)- De Raoeng en zijn jongste eruptie. Natuurkundig Tijdschrift voor Nederlandsch-Indie 73, 1, p. 84-97.

('The Raung and its latest eruption'. Presentation for KNV. Few figures. Raung in E Java one of highest volcanoes in Indonesia (3332m). Part of the Ijen complex. Rel. little activity in recent time. Most recent eruption in May-July 1913 For more complete version see Brouwer (1915))

Brouwer, H.A. (1914)- Uber leucitreiche bis leucitfreie Gesteine von G. Beser. Centralblatt Mineralogie Geologie Palaontologie 1914, p. 1-7.
(online at: https://babel.hathitrust.org/cgi/pt?id=uc1.b4291847;view=1up;seq=27)
('On leucite-rich to leucite-free rocks from Gunung Beser'. Extinct volcano N of Bondowoso in E Java, with transitions from leucite basalts to leucite-free rocks)

Brouwer, H.A. (1915)- De vulkaan Raoeng (Oost Java) en zijne erupties. Jaarboek Mijnwezen Nederlandsch Oost-Indie 42 (1913), Verhandelingen, p. 51-87.
('The Raung volcano (East Java) and its eruptions'.Investigation of poorly studied volcano Raung in Ijencomplex, E Java, after reports of increased activity in May 1913. Large (>2km wide) crater, with flat bottom and small cone near center, formed in mid-1913, also basaltic ash. All recent eruptions small. See also J.J. Richard (1935))

Brouwer, H.A. (1920)- Studien uber Kontaktmetamorphose in Niederland.-Ostindien. VI. Ein Kalksilikatwurfling des Vulkans Semeru (Java). Centralblatt Mineralogie Geologie Palaontologie 1920, p. 37-38.
(online at: https://ia801209.us.archive.org/18/items/centralblattfrm1920unse_0/centralblattfrm1920unse_0.pdf)
('Studies on contact-metamorphism in the Netherlands East Indies, VI. A calc-silicate ejecta of the Semeru volcano (Java) (calc-silicate hornfels with garnet, augite and wollastonite, ejected during November 1911 eruption, interpreted as altered Tertiary limestone fragment; see also Brouwer, 1915))

Brouwer, H.A. (1920)- Studien uber Kontaktmetamorphose in Niederland.-Ostindien. VII. Pneumatolytisch metamorphosierte Andesiteinschlusse in Leucititen des Vulkans Ringgit (Java). Centralblatt Mineralogie Geologie Palaontologie 1920, p. 38-40.
(online at: https://ia801209.us.archive.org/18/items/centralblattfrm1920unse_0/centralblattfrm1920unse_0.pdf)
('Studies on contact-metamorphism in the Netherlands East Indies, VI. Pneumatolitically metamorphosed andesite inclusions in leucitites of the Ringgit volcano (Java)'. Common contact-metamorphic andesite inclusions in Recent basic leucitite lavas from Ringgit volcano along N coast of E Java)

Brouwer, H.A. (1920)- On the composition and the xenoliths of the lava dome of the Galunggung (West-Java). Proc. Koninklijke Nederlandse Akademie van Wetenschappen, Amsterdam, 23, 8, p. 1234-1240.
(online at: https://dwc.knaw.nl/DL/publications/PU00014780.pdf)
(On earlier recrystallization products in 1918 lava dome of Galunggung volcano, W Java)

Brouwer, H.A. (1928)- Alkaline rocks of the volcano Merapi. (Java) and the origin of these rocks. Proc. Koninklijke Nederlandse Akademie van Wetenschappen 31, 4-5, p. 492-498.
(online at: https://dwc.knaw.nl/DL/publications/PU00015607.pdf)
(Nearly all Java volcanoes produced pyroxene andesites and basalts. Xenoliths in volcanic rocks of Merapi volcano include metamorphic limestones with wollastonite and diopside, sandstones and arkose)

Brouwer, H.A. (1945)- The association of the alkali rocks and metamorphic limestone in a block ejected by the volcano Merapi. (Java). Proc. Koninklijke Nederlandse Akademie van Wetenschappen 47, p. 166-189.
(online at: https://dwc.knaw.nl/DL/publications/PU00018161.pdf)
(Another description of large block of metamorphosed limestone from lahar derived from pyroxene-andesite flow in Kali Batang at SW slope of Merapi. Originally described as lenses of limestone in green 'schist', but is limestone transformed into wollastonite, gehlenite, leucite-bearing minerals, etc. No fossil evidence reported from limestone)

Brun, A. (1909)- Quelques recherches sur le volcanisme aux volcans de Java (quatrieme partie), 4. Archives Sciences Physiques Naturelles, Geneve 27, p. 113-150.

(online at: https://archive-ouverte.unige.ch/unige:144297)
('Some investigations of the volcanism at the volcanoes of Java-part 4'. Based on Brun's viisits to Java volcanoes in 1908. Brief descriptions of activity of Semeru, Bromo, with photos)

Brun, A. (1909)- Quelques recherches sur le volcanisme aux volcans de Java, 5: le Krakatau. Archives Sciences Physiques Naturelles, Geneve (4) 28, p. 45-60.
(online at: https://archive-ouverte.unige.ch/unige:143403)
('Some investigations of the volcanism at the volcanoes of Java- part 5: the Krakatau'. Brief review, based on Verbeek books and Brun's own visit to Krakatau in 1908)

Byrdina, S., S. Friedel, J. Vandemeulebrouck, A.B.-Santoso, Suhari, W. Suryanto, M.H. Rizal, E. Winata & Kusdaryanto (2017)- Geophysical image of the hydrothermal system of Merapi volcano. J. Volcanology Geothermal Research 329, p. 30-40.

Byrdina, S., H. Grandis, P. Sumintadireja, C. Caudron, D.K. Syahbana, E. Naffrechoux, H. Gunawan et al. (2018)- Structure of the acid hydrothermal system of Papandayan volcano, Indonesia, investigated by geophysical methods. J. Volcanology Geothermal Research 358, p. 77-86.
(Papandayan (2665m asl) stratovolcano 50 km from Bandung, W Java, characterized by intense hydrothermal activity. Acid hydrothermal plume delineated with Electrical Resistivity Tomography, etc. Main degassing zones in 1772 crater (Kawah Emas, Manuk, Kawah Baru) all connected to common reservoir at 100m depth (acid hydrothermal plume))

Camus, G., M. Diament, M. Gloaguen, A. Provost & P. Vincent (1992)- Emplacement of a debris avalanche during the 1883 eruption of Krakatau (Sunda Straits, Indonesia). GeoJournal 28, 2, p. 123-128.
(online at: https://www.researchgate.net/publication/226657987_Emplacement_of_a_Debris_Avalanche_during_the_1883_Eruption_of_Krakatau_Sunda_Straits_Indonesia)
(As argued by Camus & Vincent (1983), only a Mount St. Helens-type volcano collapse during eruption can account for all characteristics of 1883 Krakatau eruption and its deposits. Indonesian-French 1990 'Mentawai' marine survey confirms that sea bottom around Krakatau is covered by thick ignimbritic deposit, but also likely debris-avalanche deposit under ignimbrites, characterized by hummocky morphology to N, NW and E)

Camus, G., A. Gourgaud, P.C. Mossand-Berthommier & P.M.Vincent (2000)- Merapi (Central Java, Indonesia): an outline of the structural and magmatological evolution, with a special emphasis to the major pyroclastic events. J. Volcanology Geothermal Research 100, p. 139-163.
(Merapi Volcano history four periods: Ancient (40,000- 14,000 yrs BP), Middle, Recent (starting at 2200 yrs BP) and Modern Merapi (since eruption of 1786). Mount St. Helens-type edifice collapse during Middle Merapi stage between 6700- 2200 y BP. During Recent Merapi stage, violent magmatic to phreatomagmatic eruptions twice interrupted growth of volcano. Modern Merapi characterised by persistent growth of summit dome, y interrupted by collapses of dome to generate frequent Merapi-type nuees ardentes (blocks-and-ash flows and associated surges). Previous stages characterised by long lava flows, alternating with violent explosive phases. Merapi lavas calc-alkaline, with ~50-60% SiO2. 90% of Merapi lavas high-K basaltic andesites)

Camus, G., A. Gourgaud & P.M. Vincent (1987)- Petrologic evolution of Krakatau (Indonesia): implications for a future activity. J. Volcanology Geothermal Research 33, p. 299-316.
(Krakatau Volcano in Sunda straits characterized by phases, each beginning with construction of cone and ending with destruction and formation of caldera. Two last (pre- and post-1883) cycles well known, but older ones not clearly defined. Lava evolution shows cyclicity tied structural evolution, from basalts to basic andesites, acid andesites to dacites. Destructive stages correspond to dacitic terms. Anak Krakatau from 1927-1979 characterized by basalts and basic andesites, 1981 eruption close to dacitic)

Camus, G. & P.M. Vincent (1983)- Discussion of a new hypothesis for the Krakatau volcanic eruption in 1883. J. Volcanology Geothermal Research19, 1-2, p. 167-173.
(Discussion of Krakatau 1983 eruption, interpreted to be Mount St. Helens-type collapse event)

Carey, S., D. Morelli, H. Sigurdsson & S. Bronto (2001)- Tsunami deposits from major explosive eruptions: an example from the 1883 eruption of Krakatau. Geology (GSA) 29, 4, p. 347-350.
(Inundation of coastal areas by tsunamis during 1883 eruption of Krakatau volcano led to deposition of pumice-enriched deposits, some with significant coral fragments and non-volcanic beach sediment. Source of pumice widespread pumice rafts on surface of Sunda Straits, formed by fallout and pyroclastic flow activity)

Carey, S., H. Sigurdsson, C. Mandeville & S. Bronto (1996)- Pyroclastic flows and surges over water: an example from the 1883 Krakatau eruption. Bulletin of Volcanology 57, p. 493-511.
(Pyroclastic deposits from 1883 eruption of Krakatau described from Sebesi, Sebuku, and Lagoendi islands and SE coast of Sumatra. Massive and poorly stratified units formed from pyroclastic flows and surges that traveled over sea for distances up to 80 km. Decreasing sorting grain size and thickness with increasing distance from Krakatau. Deposits correlated to major pyroclastic flow phase on 27 August)

Carey, S., H. Sigurdsson, C. Mandeville & S. Bronto (2000)- Volcanic hazards from pyroclastic flow discharge into the sea: examples from the 1883 eruption of Krakatau, Indonesia. In: F.W. McCoy et al. (eds.) Volcanic hazards and disasters in human Antiquity, Geological Society of America (GSA), Special Paper 345, p. 1-14.

Carn, S.A. (1999)- Application of synthetic aperture radar (SAR) imagery to volcano mapping in the humid tropics; a case study in East Java, Indonesia. Bulletin of Volcanology 61, p. 92-105.

Carn, S.A. (2000)- The Lamongan volcanic field, East Java, Indonesia: physical volcanology, historic activity and hazards. J. Volcanology Geothermal Research 95, p. 81-108.
(Lamongan volcanic field in SE Java 61 basaltic cinder or spatter cones, >29 prehistoric maars, and central compound complex comprising three main vents including historically active Lamongan volcano. Persistently active between 1799-1898 and discharged up to 15 lava flows of basaltic to basaltic andesite composition, which is probably more than what was erupted by any other Indonesian volcano in that period)

Carn, S.A. & D.M. Pyle (2001)- Petrology and geochemistry of the Lamongan volcanic field, East Java, Indonesia: primitive Sunda Arc magmas in an extensional tectonic setting? Journal of Petrology 42, 9, p. 1643-1683.
(online at: https://academic.oup.com/petrology/article/42/9/1643/1408931)
(Lavas of Lamongan volcano (E Java) include medium-K basalts and basaltic andesites, along with high-K suite. Least evolved lavas lowest SiO2 contents (43 wt % SiO2) in Sunda arc volcanics. Extensional tectonics, possibly related to arc segmentation created conditions promoting rapid ascent of parental magmas, probably responsible for this and other features of complex)

Caron, M.H. (1916)- Het zwavelvoorkomen van de Kawah Idjen. Verhandelingen Geologisch-Mijnbouwkundig Genootschap Nederland Kolonien, Geologische Serie 3 (Molengraaff 25-year jubilee issue), p. 57-63.
(online at: https://ia601908.us.archive.org/30/items/verhandelingenva3191geol/verhandelingenva3191geol.pdf)
('The sulfur occurrence of Kawah Idjen'. Several 5-8m thick horizontal beds with up to 60% sulfur in the east part of crater wall of Idjen volcano, E Java, are deep crater lake deposits. Sulfur beds separated by volcanic agglomerates and tuffs. Additional sulfur around active solfatara)

Carr, B.B., A.B. Clarke & L. Vanderkluysen (2016)- The 2006 lava dome eruption of Merapi Volcano (Indonesia): detailed analysis using MODIS TIR. J. Volcanology Geothermal Research 311, 1, p. 60-71.

Carr, B.B., A.B. Clarke & M.de Michieli Vitturi (2020)- Volcanic conduit controls on effusive-explosive transitions and the 2010 eruption of Merapi Volcano (Indonesia). J. Volcanology Geothermal Research 392, 15, 106767, p. 1-12.
(online at: https://par.nsf.gov/servlets/purl/10137468)

Cassidy, M., S.K. Ebmeier, C. Helo, S.F.L. Watt, C. Caudron, A. Odell et al. (2019)- Explosive eruptions with little warning: experimental petrology and volcano monitoring observations from the 2014 eruption of Kelud, Indonesia. Geochem. Geophysics Geosystems 20, 8, p. 4218-4247.

(online at: https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2018GC008161)
(At Kelud volcano, E Java, explosive and effusive eruptions at sourced from magma storage system at 2-4 km. Explosive eruptions fed by magma stored under relatively cool (~1000 °C) and water-saturated conditions, effusive eruptions fed by hotter (~1050 °C), water-undersaturated magmas)

Cassidy, N.J., R. Gertisser, L. Nuzzo, S. Charbonnier & K. Preece (2009)- Evaluating block-and-ash flows: a GPR facies approach from Merapi Volcano, Central Java, Indonesia, 2009. Proc. 5th Int. Workshop on Advanced Ground Penetrating Radar, Granada, p 78–82.
(online at: www.researchgate.net/publication/292756710_Evaluating_block-and-ash_flows_a_GPR_facies_approach_from_Merapi_Volcano_Central_Java_Indonesia_2009)

Caudron, C., D.K. Syahbana, T. Lecocq, V. Van Hinsberg, W. McCausland, A. Triantafyllou, T. Camelbeeck, A. Bernard & Surono (2015)- Kawah Ijen volcanic activity: a review. Bulletin of Volcanology 77, 16, p. 1-39.
(online at: https://link.springer.com/content/pdf/10.1007%2Fs00445-014-0885-8.pdf)
(Historic activity since 1770 of Kawah Ijen (2386 m) easternmost Java, an active composite volcano within the Pleistocene Ijen caldera complex. Caldera 18x15 km in diameter and contains >15 post caldera volcanic cones. Major eruption in 1817)

Chadwick, J.P., V.R. Troll, C. Ginibre, D. Morgan, R. Gertisser, T.E. Waight & J.P. Davidson (2007)- Carbonate assimilation at Merapi Volcano, Java, Indonesia: insights from crystal isotope stratigraphy. Journal of Petrology 48, 9, p. 1793-1812.
(online at: https://academic.oup.com/petrology/article/48/9/1793/1580168)
(Recent Merapi andesite lavas with abundant, complexly zoned, plagioclase phenocrysts. Sr isotopes require source or melt with elevated radiogenic Sr, rich in Ca and lower Mg and Fe. Abundant xenoliths, including metamorphosed volcanoclastic sediment and carbonate country rock. Mineralogy and geochemistry indicate magma-crust interaction at Merapi more significant than previously thought. Sr isotopes in plagioclase compared to Wonosari Lst from Parangtritis)

Chadwick, J.P., V.R. Troll, T.E. Waight, F.M. van Der Zwan & L.M. Schwarzkopf (2013)- Petrology and geochemistry of igneous inclusions in recent Merapi deposits: a window into the sub-volcanic plumbing system. Contributions to Mineralogy and Petrology 165, 2, p. 259-282.
(Common igneous inclusions in basaltic-andesite lavas of Merapi, C Java, suggesting complex sub-volcanic magmatic system. Four main types: (1) highly crystalline basaltic-andesite inclusions, (2) co-magmatic enclaves, (3) plutonic crystalline inclusions and (4) amphibole megacrysts)

Charbonnier, S.J. & R. Gertisser (2008)- Field observations and surface characteristics of pristine block-and-ash flow deposits from the 2006 eruption of Merapi Volcano, Java, Indonesia. J. Volcanology Geothermal Research 177, 4, p. 971-982.
(Observations of internal archtecture of 2006 block-and-ash flow at S flank of Merapi volcano, C. Java)

Charbonnier, S.J. & R. Gertisser (2011)- Deposit architecture and dynamics of the 2006 block-and-ash flows of Merapi Volcano, Java, Indonesia. Sedimentology 58, 6, p. 1573-1612.
(Internal archtecture of rel. small 2006 block-and-ash flows at S flank of Merapi volcano, C. Java, generated by gravitational lava-dome collapses over period of two months. Variations in distribution, surface morphology and lithology related to source materials involved during individual events and to effects of changing slope, channel morphology and local topographic features on flow dynamics)

Claproth, R. (1988)- Petrography and geochemistry of volcanic rocks from Ungaran, Central Java, Indonesia. Ph.D. Thesis, University of Wollongong, p. 1-500.
(online at: http://ro.uow.edu.au/theses/1398/)
(Ungaran volcano, C Java, forms part of second of three cycles of volcanism recognized on Java and was active between Late Pliocene- Late Pleistocene. Three stages of growth, interrupted episodes of cone collapse. Lavas are basalts, basaltic andesites and andesites. Most basalts are shoshonites, andesites are high-K calcalkaline.

Shoshonitic rocks dominated early stages of activity. Low Mg-numbers indicate basalts crystallized from derivative melts, and do not represent mantle-derived magma)

Claproth, R. (1989)- Magmatic affinities of volcanic rocks from Ungaran, Central Java. Geologi Indonesia (IAGI) 12, 1 (Prof. Dr. J.A. Katili 60 years Special Volume), p. 511-562.
(Lengthy paper on Late Pliocene- Late Pleistocene volcanic rocks of Ungaran volcano, C. Java. Early stages of Ungaran mainly shoshonitic rocks, later stages mostly high-K calk-alkaline andesites)

Cool, H. (1908)- Eenige mededelingen en beschouwingen naar aanleiding van een onderzoek aan den kraterwand van den Kloet in Mei 1907. Jaarboek Mijnwezen Nederlandsch Oost-Indie 36 (1907), p. 185-233.
('Some notes and observations from an investigation of the crater wall of the Kelud in May 1907'. Rel. detailed early decription of Kelud volcano in E Java. With maps, many photos)

Cool, H. (1910)- Krakatau in 1908. Jaarboek Mijnwezen Nederlandsch Oost-Indie 37 (1908), p. 183-195.
(Well-illustrated description of Krakatau volcano in Sunda Strait in May-August, 1908)

Cool, H. (1910)- Verslag omtrent een onderzoek aan den Semeroe in verband met de ramp van Loemadjang. Jaarboek Mijnwezen Nederlandsch Oost-Indie, 38 (1909), p. 297-331.
(online at: https://www.delpher.nl/nl/boeken/view?identifier=MMKB18A:019506000:00045)
('Report of an investigation of the Semeru in connection with the disaster of Loeumadjang'. Lumajang town and area, 30km E of summit of Semeru, damaged by 'banjirs' and mudflows derived from Semeru volcano on 29-30 August 1909 and killed >200 people)

Cool, W. (1931)- Het Merapi-gebeuren in Midden-Java, bij de jaarwisseling 1930/31. De Ingenieur 46, 37, A, p. 342-357.
(online at: https://resolver.kb.nl/resolve?urn=dts:2958038:mpeg21:pdf)
('The Merapi events around New Year 1930/31'. Comprehensive, well illustrated report on the disastrous Merapi eruption(s) of December 1930, culminating in the major lahar/pyroclastic flows of December 18/19, which claimed numerous casualties, including mantri Bardi Kartodihardjo of the Vulcanological Survey (by eyewitness Wouter Cool, brother of Dienst van den Mijnbouw mining engineer Hugo Cool, who died during a Mijnwezen journey in Makassar in March 1910 at young age age 30). Partly based on observations of Ir. J.B. Grandjean and. Neumann van Padang)

Costa, F., S. Andreastuti, C. Bouvet de Maisonneuve & J.S.Pallister (2013)- Petrological insights into the storage conditions, and magmatic processes that yielded the centennial 2010 Merapi explosive eruption. J. Volcanology Geothermal Research 261, p. 209-235.
(2010 eruption of Merapi much larger and more explosive than most dome-forming eruptions of past century)

Cronin, S. J., G. Lube, D.S. Dayudi, Sri Sumarti, S. Subrandiyo & Surono (2013)- Insights into the October-November 2010 Gunung Merapi eruption (Central Java, Indonesia) from the stratigraphy, volume and characteristics of its pyroclastic deposits. J. Volcanology Geothermal Research 261, p. 244-259. *(online at: https://www.researchgate.net/publication/236974518_Insights_into_the_October-November_2010_Gu Etc.)*
(Merapi eruption of 2010 was second most deadly in historic record ofMerapi, claiming over 380 lives. Valley controlled block-and-ash flows spread farther than before (16 km in Kali Gendol) and widespread, energetic pyroclastic surges, destruction of dense forest on the upper southern slopes of the volcano, etc.)

Cutler, K.S., S.F. Watt, M. Cassidy, A.L. Madden-Nadeau, S. L. Engwell, M. Abdurrachman et al. (2022)- Downward-propagating eruption following vent unloading implies no direct magmatic trigger for the 2018 lateral collapse of Anak Krakatau. Earth Planetary Science Letters 578, 117332, p. 1-15.
(Characteristics of post-collapse tephra deposits imply downward propagating destabilisation of magma storage system as response to collapse, rather than pre-collapse magma ascent triggering failure)

Dahren, B., V.R. Troll, U.B. Andersson, J.P. Chadwick, M.F. Gardner, K. Jaxybulatov & I. Koulakov (2012)- Magma plumbing beneath Anak Krakatau volcano, Indonesia: evidence for multiple magma storage regions. Contributions to Mineralogy and Petrology 163, 4, p. 631-651.
(Petrological studies identified shallow magma storage 2-8 km beneath Krakatau, while seismic evidence pointed towards deeper crustal storage zones at 9 and 22 km. Clinopyroxene in Anak Krakatau lavas crystallized at of 7-12 km depth, plagioclase at shallow crustal (3-7 km) and sub-Moho (23–28 km) levels. New seismic tomography shows separate upper crustal (<7 km) and lower-mid-crustal magma storage regions)

Dalimin, R. (1988)- Some aspects of nature and origin of widespread pyroclastic flow deposits surrounding Tangkuban Perahu, Bandung, West Java. M.Sc. Thesis, Wellington University, New Zealand, p. 1-58.

De Belizal, E. (2012)- Les corridors de lahars du volcan Merapi (Java, Indonesie): des espaces entre risque et ressource. Contribution a la geographie des risques au Merapi. Doct. Thesis Universite Pantheon-Sorbonne, Paris I, p. 1-495.
(online at: https://theses.hal.science/tel-00931862v1/file/de-belizal_edouard--these.pdf
('The lahar corridors of the Merapi volcano (Java, Indonesia): spaces between risk and resource. Contribution to the risk geography at Merapi')

Decker, R.W. (1959)- Renewed activity of Anak Krakatau. Contributions Institut Teknologi Bandung (ITB), Bagian Geologi, 34, p. 1-5.

Decker, R.W. & D. Hadikusumo (1961)- Results of the 1960 expedition to Krakatau. J. of Geophysical Research 66, 10, p. 3497-3511.
(Twelve-men ITB expedition to Anak Krakatau on January 12-13, 1960, witnessing explosive eruptions of pyroclastics with ejecta ranging from fine ash to blocks 2m in diameter, at 0.5 to 10-minute intervals. Twenty small, turbulent, explosion clouds of gas and ash rising 150-300 meters alternated with 4-6 larger eruptions of gas, ash, and lapilli clouds turbulently rising to 1200m, with larger blocks landing up to 600m from vent. Seismic records indicate eruptions begin at ~200m below sea level. Present composition of ejecta still basaltic)

Deegan, F.M., V.R. Troll, C. Freda, V. Misiti, J.P. Chadwick et al. (2010)- Magma- carbonate interaction processes and associated CO_2 release at Merapi Volcano, Indonesia: insights from experimental petrology. Journal of Petrology 51, 5, p. 1027-1051.
(online at: http://petrology.oxfordjournals.org/content/51/5/1027.full.pdf)
(Evidence for late-stage interaction between magmatic system and local limestone at Merapi volcano, C Java: calc-silicate xenoliths within Merapi basalts-andesites and feldspar phenocrysts frequently with crustally contaminated cores and zones)

Deegan, F.M., V.R. Troll, C. Freda, V. Misiti & J.P. Chadwick (2011)- Fast and furious: crustal CO_2 release at Merapi volcano, Indonesia. Geology Today 27, 2, p. 63-64. *(online at: www.academia.edu/124637380/Fast_and_furious_crustal_CO_2_release_at_Merapi_volcano_Indonesia)*
Experiments show that when Merapi magma interacts with limestone-rich crustal rock, CO2 bubbles form rapidly, which then rapidly expand and markedly increase explosivity of magma)

Deegan, F.M., V.R. Troll, R. Gertisser & C. Freda (2023)- Magma-carbonate interaction at Merapi Volcano, Indonesia. In: R. Gertisser at al. (eds.) Merapi volcano- geology, eruptive activity, and monitoring of a high-risk volcano. Springer Nature, Berlin, Chapter 10, p. 291-321.
(Merapi volcano, Java, built on crustal succession that includes thick carbonate sequences. Calcsilicate (skarn) xenoliths are frequently found in Merapi's erupted products. Xenoliths subdivided into two main groups: (1) magmatic skarns formed within the magma system and(2) exoskarns formed of metamorphosed wall-rocks. Carbonate assimilation in Merapi-type magma can rapidly produce a voluminous C–O–H gas phase)

Deegan, F.M., M.J. Whitehouse, V.R. Troll, H. Geiger, H. Jeon, P. le Roux, C. Harris, M. van Helden & O. Gonzalez-Maurel (2021)- Sunda arc mantle source δ18O value revealed by intracrystal isotope analysis. Nature Communications 12, 3930, p. 1-10.

(online at: www.nature.com/articles/s41467-021-24143-3.pdf)
(Magma plumbing systems under subduction zone volcanoes extend from mantle through overlying crust, facilitating assimilation and mixing, which obscures mantle source compositions. δ18O values in clinopyroxene from Merapi, Kelut, Batur, and Agung volcanoes (under which crustal thickness decreases from ca. 30 km at Merapi to ≤20 km at Agung) decrease with crustal thickness. Lavas from Agung with mantle-like He-SrNd-Pb isotope ratios and clinopyroxene δ18O indistinguishable from Mid Ocean Ridge Basalt)

De Hoog, J.C.M, P.R.D. Mason & M.J van Bergen (2001)- Sulfur and chalcophile elements in subduction zones: constraints from a laser ablation ICP-MS study of melt inclusions from Galunggung Volcano, Indonesia. Geochimica Cosmochimica Acta 65, p. 3147-3164.
(Mafic melt inclusions in olivine phenocrysts in high-Mg basalts of Galunggung volcano (Java). Sulfur in mantle beneath Galunggung significantly enriched relative to MORB source mantle, suggesting large-scale fluxing of sulfur into the mantle wedge during slab dehydration. Etc.)

Del Marmol, M.A. (1989)- The petrology and geochemistry of Merapi volcano, Central Java, Indonesia. Ph.D. Thesis, Johns Hopkins University, Baltimore, p. 1-384. *(Unpublished)*

Del Marmol, M.A. & B.D. Marsh (1988)- Merapi volcano, Central Java, Indonesia: petrology and geochemistry. Chemical Geology 70, 1-2, p. 86. *(Abstract only)*
(Merapi stratocone lavas are calc-alkaline hi-Al basalts and andesites ranging in Si02 from 49-56%)

Delmelle, P. & A. Bernard (1994)- Geochemistry, mineralogy, and chemical modeling of the acid crater lake of Kawah Ijen Volcano, Indonesia. Geochimica Cosmochimica Acta 58, 11, p. 2445-2460.

Delmelle, P., A. Bernard, Kusakabe, T. Fischer & B. Takano (2000)- Geochemistry of the magmatic-hydrothermal system of Kawah Ijen volcano, East Java, Indonesia. J. Volcanology Geothermal Research 97, p. 31-53.
(online at: https://www.academia.edu/12007408/Geochemistry_of_the_magmatic_hydrothermal_system_of_Kawah_Ijen_volcano_East_Java_Indonesia)
(Chemical and isotopic analyses of samples from Kawah Ijen crater lake and spring)

Dempsey, S.R. (2013)- Geochemistry of volcanic rocks from the Sunda Arc. Ph.D. Thesis Durham University, p. 1-279.
(online at: http://etheses.dur.ac.uk/6948/1/ScottDempsey_Thesis.pdf)
(Geochemistry and isotopic (Sr-Nd-Hf-Pb) examination of volcanoes from W Java (Papandayan, Patuha, Galunggung), C Java (Sumbing), E Java (Kelut) and Bali (Agung). Contamination in arc crust more extensive than previously recognised, particularly in W and C Java. Papandayan and Patuha significant enrichments in isotope ratios above mantle values, indicating terrigeneous crustal contamination. Magma compositions of Sumbing similar to Merapi and Merbabu, with strong evidence for assimilation of carbonate-rich lithologies)

De Neve, G.A. (1946)- The Semeroe volcano. Geologie en Mijnbouw 8, 7, p. 55.
(online at: https://drive.google.com/file/d/0B7j8bPm9Cse0NXZwcWVlY29VZGM/view?pli=1&resourcekey=0-JvV8XrM3V4LWT7YuXesJbg)
(Brief note reporting on May 1946 and later activity of Semeru volcano, after tranquil period since 1941)

De Neve, G.A. (1953)- Krakatau and Anak Krakatau with a communication on the latest investigation in Oct. 1953: Proc. 8th Pacific Science Congress, Philippines, 2, p. 178-179.

De Neve, G.A. (1981)- Anak Krakatau, fifty years of geomorphological development and growth with the petrographically derived consequences. Proc. 10th Annual Conv. Indonesian Association Geologists (IAGI), Bandung, p. 7-40.
(online at: https://www.iagi.or.id/web/digital/34/PIT-IAGI-1981-Vol-1-Paper-2.pdf)
(On historic eruption cycles and petrographic changes of Krakatau and Anak Krakatau volcano. Magmas typically progress from normal dioritic phase to quartz-diorite and finally to plagioclase granite composition

which created optimum conditions for a new cataclysmic outburst. With series of detailed maps of Anak Krakatau from 1928-1981)

De Neve, G.A. (1981)- Historical notes on Krakatau's eruption of 1883, and activities in previous times. National Institute of Oceanology (LON-LIPI), Publ. No. LON/COAST/III-14, Jakarta, p. 1-45.

De Neve, G.A. (1981)- Petrographic- petrological considerations on Krakatau. Berita Geologi, Geosurvey Newsletter 13 (14), p. 138-143.

De Neve, G.A. (1982)- The Krakatau group and Anak Krakatau's eruptivity; Snapshot of 1981. Berita Geologi (Geosurvey Newsletter) 14, 23, p. 195-211.

De Neve, G.A. (1983)- Krakatau's earliest known activity: was it prehistoric? Berita Geologi (Bandung) 15, p. 39-44.

De Neve, G.A. (1985)- Geovolcanology of the Krakatau Goup in the Sunda Strait region: review of a hundred years developments (1883-1983). In: D. Sastrapradja et al. (eds.) Proc. Symposium on 100 years development of Krakatau and its surroundings, Jakarta 1983, Indonesian Inst. of Sciences (LIPI), 1, p. 20-34.

De Neve, G.A. (1985)- Earlier eruptive activities of Krakatau in historic time and during the Quaternary. In: D. Sastrapradja et al. (eds.) Proc. Symposium 100 years development of Krakatau and its surroundings, Jakarta 1983, Lembaga Ilmu Pengetahuan Indonesia (LIPI), 1, p. 35-46.

De Neve, G.A. (1992)- Krakatau Bibliography: a comprehensive bibliography of Krakatau volcano in the Sunda Straits and its adjacent regions (Indonesia). Volcanological Survey of Indonesia, Bandung, p. 1-645.
(Very extensive bibliography of Krakatau volcano and geology of adjacent regions)

Deplus, C., S. Bonvalot, D. Dahrin, M. Diament, H. Harjono & J. Dubois (1995)- Inner structure of the Krakatau volcanic complex (Indonesia) from gravity and bathymetry data. J. Volcanology Geothermal Research 64, p. 23-52.
(online at: https://core.ac.uk/download/pdf/39854604.pdf)
(Study of inner structure of Krakatau volcano, Sunda straits, from bathymetry and gravity surveys. Krakatau characterized by flat sea bottom at -240 m and steep linear walls, suggesting caldera collapse controlled by pre-existing features. Build-up of Anak Krakatau on edge of caldera could lead to mechanically unstable conditions. 3-D gravity modelling reveals previously unknown geometry of dense substratum of proto-Krakatau and shows presence of collapsed structure beneath caldera filled with low-density material. Etc.)

Dirk, M.H.J. (2007)- Petrologi dan geokimia batuan gunung api di Gunung Mandalawangi dan sekitarnya. Jurnal Sumber Daya Geologi (JSDG) 17, Special Issue (163), p. 11-22.
('Petrology and geochemistry of volcanic rocks of Gunung Mandalawangi and surroundings'. Quaternary volcanics of Mandalawangi volcano ESE of Bandung, W Java, basaltic andesite, andesite, dacite and high-K rhyolite of calk-alkaline affinity, as typically formed in island arc environment)

Dirk, M.H.J. (2007)- Petrologi batuan gunung api Kareumbi dan sekitarnya, Sumedang, Jawa Barat. Jurnal Sumber Daya Geologi (JSDG) 17, Special Issue (163), p. 23-34.
('Petrology of volcanic rocks of Kareumbi and surroundings, Sumedang, West Java'. Quaternary volcanics of Kareumi, E of Bandung, mainly basaltic andesite, andesite and dacite of calc-alkaline affinity)

Disando, T. & M. Abdurrachman (2017)- Distinct geochemical features in a magmatic arc system: a comparison between Lasem and Muria volcano. Proc. Joint Convention HAGI-IAGI-IAFMI-IATMI (JCM 2017), Malang, p. 1-5.
(Geochemistry of Lasem and Muria volcanoes on back arc side of Java Magmatic Arc. Common pyroclastic deposits and pumiceous deposits)

Douglas, E.A. (1912)- De uitbarsting van den Tangkoeban Prahoe in April 1910. Jaarboek Mijnwezen Nederlandsch Oost-Indie 39 (1910), p. 80-86.
('The eruption of the Tangkuban Perahu in April 1910' (see also Fennema 1896 about May 1896 eruption)

Doyle, E.E., S.J. Cronin, S.E. Cole & J. Thouret (2010)- The coalescence and organization of lahars at Semeru volcano, Indonesia. Bulletin of Volcanology 72, 8, p. 961-970.

Dumaisnil, C., J.C. Thouret, G. Chambon, E.E. Doyle, S. J. Cronin & Surono (2010)- Hydraulic, physical and rheological characteristics of rain-triggered lahars at Semeru volcano, Indonesia. Earth Surface Processes and Landforms 35, 13, p. 1573-1590.

Dvorak, J., J. Matahelumual, A.T. Okamura, H. Said, T.J. Casadevall & D. Mulyadi (1990)- Recent uplift and hydrothermal activity at Tangkuban Parahu Volcano, West Java, Indonesia. Bulletin of Volcanology 53, p. 20-28.

Edwards, C.M.H., M. Menzies & M. Thirlwall (1991)- Evidence from Muriah, Indonesia, for the interplay of supra- subduction zone and intraplate processes in the genesis of potassic alkaline magmas. Journal of Petrology 32, 3, p. 555-592.
(online at: https://www.academia.edu/26431481/Evidence_from_Muriah_Indonesia_for_the_Interplay_of_Supra_Subduction_Zone_and_Intraplate_Processes_in_the_Genesis_of_Potassic_Alkaline_Magmas)
(High-K alkaline Muriah volcano in C Java has younger high-potassic series (HK) and older potassic series (K). Proposed model for Muriah lavas three source components: (1) asthenosphere of mantle wedge of Sunda arc, which has Indian Ocean MORB characteristics; (2) metasomatic layer at base of lithosphere, which has enriched mantle characteristics; (3) subducted pelagic sediments. Calc-alkaline magma contaminated by arc crust before mixing. Magmas show transition from intraplate to subduction zone processes in genesis)

Edwards, C.M.H., M.A. Menzies, M.F. Thirlwall, J.D. Morris, W.P. Leeman &, R.S. Harmon (1994)- The transition to potassic alkaline volcanism in island arcs: the Ringgit-Beser complex, East Java, Indonesia. Journal of Petrology 35, 6, p. 1557-1595. *(online at: https://www.academia.edu/26431478/The_Transition_to_Potassic_Alkaline_Volcanism_in_Island_Arcs_The_Ringgit_Beser_Complex_East_Java_Indonesia)*
(Ringgit-Beser volcanic complex lavas of normal island arc calc-alkaline type and atypical potassic lavas, including high-Mg lavas. Incompatible trace element and Pb isotope data for calc-alkaline lavas indicate similar source to other calc-alkaline lavas in Java (Indian Ocean MORB mantle fluxed by fluids from subducted slab). Potassic lavas from enriched mantle sources within wedge not affected by recent subduction processes)

Effendi, A.C., S. Bronto & R. Sukhyar (1986)- Geologic map of Krakatau volcano complex, Sunda Strait, Lampung Province. Volcanological Survey of Indonesia, Bandung, 1:25,000 Geological map.

Erdmann, S., C. Martel, M. Pichavant, J.L. Bourdier, R. Champallier, J.C. Komorowski & N. Cholik (2016)- Constraints from phase equilibrium experiments on pre-eruptive storage conditions in mixed magma systems: a case study on crystal-rich basaltic andesites from Mount Merapi, Indonesia. Journal of Petrology 57, 3, p. 535-560.
(online at: https://academic.oup.com/petrology/article/57/3/535/1752840)
(Experiments on Merapi volcano basaltic andesites suggests pre-eruptive reservoir partially crystallizes at ~100-200 MPa (4.5- 9 km). Magmas are stored at ~925-950°C with melt H2O content of ~3-4 wt %. Pre-eruptive recharge magmas T 950-1000°C, and higher melt H2O content of ~4-5 wt %)

Escher, B.G. (1920)- De Kloet van een geomorfologisch standpunt beschouwd. Natuurkundig Tijdschrift voor Nederlandsch-Indie 79, 1, p. 120-127.
('The Kelud volcano, considered from a geomorphological view'. Kelud volcano characterized by crater lake and rel. voluminous lahars during eruptions, probably for 1000s of years. This is probably reason why Kelud slopes less steep than other volcanoes. Not clear why Kelud crater walls appear to be less permeable than most

other volcanoes in Indonesia. Escher was probably the first to propose drilling of tunnel to drain crater lake. No figures)

Escher, B.G. (1919)- Excursie-gids voor Krakatau. Fieldtrip guide for Eerste Nederlandsch-Indisch Natuurwetenschappelijk Congres, Batavia, October 1919, p. 1-7.
(Brief fieldtrip guidebook with same figures as Escher (1920))

Escher, B.G. (1920)- De Krakatau groep als vulkaan. Handelingen Eerste Nederlandsch-Indisch Natuurwetenschappelijk Congres, Batavia, October 1919, p. 28-35.
(Brief presentation summary of review on Krakatau volcano. No figures)

Escher, B.G. (1920)- Veranderingen in de Krakatau groep na 1908. Wijzigingen in de opvattingen van eenige geologische details en losse aanteekeningen. Handelingen Eerste Nederlandsch-Indisch Natuurwetenschappelijk Congres, Batavia, October 1919, p. 198-219.
(read online at: https://bosscha.itb.ac.id/id/tentang/koleksi-digital/?mivast=50015&miadt=50000&miaet Etc.)
('Changes in the Krakatau group after 1908: modifications of the views on some geologic details and miscellaneous notes'. Observations during a one-week survey of the remnants of Krakatau volcano in July 1919. With geologic map of the steep remnant cliff of Rakata at the caldera rim)

Escher, B.G. (1925)- L'eboulement prehistorique de Tasikmalaja et le volcan Galounggoung (Java). Leidsche Geologische Mededelingen 1, p. 8-21.
(online at: www.repository.naturalis.nl/document/549247)
('The prehistoric collapse at Tasikmalaya and the Galunggung volcano'. The area of ten thousand hills of Tasikmalaya is in front of large SE missing sector of Galunggung volcano, and probably formed as gravity collapse of volcano flank)

Escher, B.G. (1927)- Vesuvius, the Tengger Mountains and the problem of calderas. Leidsche Geologische Mededelingen 2, p. 51-88.
(online at: www.repository.naturalis.nl/document/549675)
(Includes discussion of Bromo Caldera, Tengger Mountains of East Java)

Escher, B.G. (1928)- Krakatau in 1883 en in 1928. Tijdschrift Koninklijk Nederlands Aardrijkskundig Genootschap 45, 4, p. 715-743.
(online at: https://www.delpher.nl/nl/tijdschriften/ Etc.)
(On details and mechanism of Krakatoa eruptions of 1883 and 1928)

Escher, B.G. (1931)- Over het vulkanisme van Java in verband met de uitbarsting van den Merapi. De Ingenieur 46, 37, A, p. 357-373.
(online at: https://resolver.kb.nl/resolve?urn=dts:2958038:mpeg21:pdf)
('About the volcanism on Java, in relation with the eruption of the Merapi'. General discussion about processes that cause volcanism, magma types, eruption types, etc. Merapi characterized by formation of lava domes, followed by lava avalanches with pyroclastic flows after dome collapses)

Escher, B.G. (1933)- On the character of the Merapi eruption in Central Java. Leidsche Geologische Mededelingen 6, p. 51-58.
(online at: https://repository.naturalis.nl/document/549807)
(Mainly discussion of two paintings of 1865 Merapi eruption by Raden Saleh in 1865, acquired by the National Geological and Mineralogical Museum in Leiden in 1931)

Faber, F.J. (1964)- Modderkogels, mergelconcreties of askogels van Krakatau. Geologie en Mijnbouw 43, 11, p. 467-475.
(online at: https://drive.google.com/file/d/0B7j8bPm9Cse0TFBuVUhtcWk2d2c/view)
('Mud bullets, marl concretions or ash bullets from Krakatoa'. Example of spherical mud balls or 'ash-balls' up to 7 cm in diameter. Origin somewhat unclear. Some shapes reminescent of billitonite/australite tektites)

Fennema, R. (1886)- De vulkanen Semeroe en Lamongan. Jaarboek Mijnwezen Nederlandsch Oost-Indie 15 (1886), Wetenschappelijk Gedeelte, p. 5-130.
('The volcanoes Semeru and Lamongan', East Java. Rel. detailed early descriptions of Semeru (Mahameru; incl. Tengger caldera) and Lamongan volcanoes in East Java, and their eruptive histories. Current survey triggered by April 1885 eruption of Semeru, the lahars of which killed 70 people and destroyed coffee estate with ash and rocks))

Fennema, R. (1895)- De uitbarsting van den vulkaan 'Galoenggoeng' op 18 en 19 October 1894. Jaarboek Mijnwezen Nederlandsch Oost-Indie 24 (1895), p. 58-84.
('The eruption of the volcano 'Galunggung' on 18 and 19 October'. West Java active volcano)

Fennema, R. (1912)- De uitbarsting van den Tangkoeban Prahoe in Mei 1896. Jaarboek Mijnwezen Nederlandsch Oost-Indie 39 (1910), p. 74-79.
('The eruption of the Tangkuban Perahu in May 1896')

Fermin, P.G.H.A. (1951)- Beknopt verslag van een voorlopig geologisch onderzoek in 1942, op de hellingen van de Gunung Muriah, naar het voorkomen van leuciet-houdende gesteenten. De Ingenieur in Indonesie, IV, 3, 5, p. 23-30.
('Brief report on a preliminary investigation in July-August 1942 on leucite-bearing rocks on the slopes of Gunung Muriah'. Investigation into potassium-rich volcanics of the large, extinct Muriah double volcano in NE Java. By interned Geological Survey-Bandung personnel, including G. ter Bruggen (with assistant geologist A.F. Lasoet (Lasut), L. Boomgaart (with Suno Sumosusastro) and P. Fermin (with Slamet), under Japanese supervision. Average K2O content 4.35%)

Fiantis, D., F.I. Ginting, Seprianto, F. Halfero, A.P. Saputra, M. Nelson, E. van Ranst & B. Minasny (2021)- Geochemical and mineralogical composition of the 2018 volcanic deposits of Mt. Anak Krakatau. Geoderma Regional 25, e00393, p. 1-9.
(Volcanic ash and lapilli from 22 December 2018 Anak Krakatau eruption of basalt to basaltic-andesite composition)

Francis, P.W. (1985)- The origin of the 1883 Krakatau tsunamis. J. Volcanology Geothermal Research 25, 3-4, p. 349-363.
(Three hypotheses proposed to explain causes of 1883 Krakatau tsunami: (1) collapse of N part of Krakatau island (Verbeek, 1884); (2) submarine explosion (Yokoyama, 1981), and (3) emplacement of pyroclastic flows (Latter, 1981). Most likely mechanism Mt. St. Helens-like scenario, close to hypothesis of Verbeek, in which collapse of part of original volcanic edifice propagated major explosion)

Franssen Herderschee, A. (1909)- De opneming van de Krakatau-groep in Mei 1908. Jaarverslag Topographische Dienst Nederlandsch-Indie 1908, Batavia, p. 1-57.
('Topographic survey of the Krakatau group in May 1908'. Report on a brief survey of the remnants of Krakatau volcano. With contributions on depth soundings by W. van Bemmelen (observed rel. flat crater floor at 250-280m water depth), geology by Ir. Hugo Cool (nothing new) and flora and fauna by C. Backer and E.R. Jacobson. With photos by J. Demmeni)

Fukashi, M. & F. Imamura (2011)- Tsunami generation by a rapid entrance of pyroclastic flow into the sea during the 1883 Krakatau eruption, Indonesia. J. of Geophysical Research: Solid Earth 116, 9, B09205, p. 1-24.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2011JB008253)

Furneaux, R. (1964)- Krakatoa. Prentice-Hall, Englewood Cliffs, N.J., p. 1-224.

Gardner, M.F., V.R. Troll, J.A. Gamble, R. Gertisser, G.L. Hart, R.M. Ellam, C. Harris & J.A. Wolff (2012)- Crustal differentiation processes at Krakatau Volcano, Indonesia. Journal of Petrology 54, 1, p. 149-182.
(online at: http://petrology.oxfordjournals.org/content/early/2012/10/31/petrology.egs066.full.pdf+html)

(Anak Krakatau is basaltic andesite cone that has grown following caldera-forming 1883 eruption of Krakatau. Since 1950s has been growing at rate of ~8 cm/ week. Anak Krakatau magmas have genetic relationship with 1883 eruption products. With granitic- dioritic and metasedimentary (with cordierite) xenoliths. Low levels of assimilation of quartzo-feldspathic sediment recorded)

Genareau, K., S.J. Cronin & G. Lube (2015)- Effects of volatile behaviour on dome collapse and resultant pyroclastic surge dynamics: Gunung Merapi 2010 eruption. Geological Society, London, Special Publ. 410, p. 199-218.

Gerbe, M.C., A. Gourgaud, O. Sigmarsson, R. Harmon, J.L. Joron & A. Provost (1992)- Mineralogical and geochemical evolution of the 1982-1983 Galunggung eruption (Indonesia). Bulletin of Volcanology 54, 4, p. 284-298.
(online at: www.researchgate.net/publication/227068263_Mineralogical_and_geochemical_evolution_of_the_1982-1983_Galunggung_eruption_Indonesia)
(Pyroclastic deposition of 1982-1983 eruption of Galunggung, W Java, lasted 9 months, with diversity of eruptive style, and progressive evolution from andesite (58 wt.% SiO2) to high-Mg basalt (47 wt.% SiO2). Galunggung basalts most primitive basalts known from W Java, with phenocrysts of olivine, diopside, etc.)

Gertisser, R. (2001)- Gunung Merapi (Java, Indonesien): Eruptionsgeschichte und magmatische Evolution eines Hochrisiko-Vulkans. Doktoral Dissertation, Albert-Ludwigs University, Freiburg in Breslau, p. 1-382.
(online at: https://core.ac.uk/download/pdf/43759112.pdf)
('Gunung Merapi (Java, Indonesia): eruption history and magmatic evolution of a high-risk volcano'))

Gertisser, R. N.J. Cassidy, S.J. Charbonnier, L. Nuzzo & K. Preece (2012)- Overbank block-and-ash flow deposits and the impact of valley-derived, unconfined flows on populated areas at Merapi volcano, Java, Indonesia. Natural Hazards 60, p. 623-648.
(online at: www.academia.edu/23620238/Overbank_block-and-ash_flow_deposits_and_the_impact_of_valley-derived_unconfined_flows_on_populated_areas_at_Merapi_volcano_Java_Indonesia)
(Pyroclastic block-and-ash flows are capable of transporting significant numbers of large blocks (>1-2 m) out of the valley confines)

Gertisser, R., S.J. Charbonnier, V.R. Troll, J. Keller, K. Preece, J.P. Chadwick, J. Barclay & R.A. Herd (2011)- Merapi (Java, Indonesia): anatomy of a killer volcano. Geology Today 27, 2, p. 57-62.
(Merapi is Indonesia's most dangerous volcano. Over past two centuries volcanic activity dominated by prolonged periods of basaltic andesite lava dome growth and intermittent dome failures to produce pyroclastic flows every few years. Explosive eruptions, such as in 2010, more common in pre-historic time. Calc-silicate xenoliths brought up by Merapi magmas indicate assimilation of carbonate rocks from sub-volcanic basement)

Gertisser, R., S.J. Charbonnier, J. Keller & X. Quidelleur (2012)- The geological evolution of Merapi volcano, Central Java, Indonesia. Bulletin of Volcanology 74, 5, p. 1213-1233. *(online at: www.academia.edu/23458168/The_geological_evolution_of_Merapi_volcano_Central_Java_Indonesia)*
(Eight main volcano stratigraphic units distinguished in Merapi volcano of C Java, linked to three main evolutionary stages:Proto-Merapi, Old Merapi and New Merapi. Construction of Merapi complex began after 170 ka. Proto-Merapi volcanic edifices Gunung Bibi (109±60 ka) in NE and Gunung Turgo and Gunung Plawangan (~138, 135 ka) in S. Old Merapi started to grow at ~30 ka as stratovolcano of basaltic andesite lavas and pyroclastic rocks and was destroyed by flank failure after 4.8±1.5 ka. Shift from medium-K to high-K character of volcanics at ~1900 years BP)

Gertisser, R., M.A. del Marmol, C. Newhall, K. Preece, S. Charbonnier, S. Andreastuti et al. (2023)- Geological history, chronology and magmatic evolution of Merapi. In: R. Gertisser at al. (eds.) Merapi volcano- geology, eruptive activity, and monitoring of a high-risk volcano. Springer Nature, Berlin, Chapter 6, p. 137-193.
(online at: https://ris.utwente.nl/ws/portalfiles/portal/311755333/978_3_031_15040_1_6.pdf)
(Synthesis of geological history and magmatic evolution of Merapi. Three main evolutionary stages and associated volcanic edifices (Proto-, Old and New Merapi), and eight main volcano-stratigraphic units)

Gertisser, R. & J. Keller (2003)- Temporal variations in magma composition at Merapi Volcano (Central Java, Indonesia): magmatic cycles during the past 2000 years of explosive activity. J. Volcanology Geothermal Research 123, p. 1-23.
(Merapi Volcano in C Java frequently active in M-Late Holocene, producing basalts and basaltic andesites of medium-K composition in earlier stages of activity and high-K magmas from ~1900 BP to present. Periods of high eruption rates alternate with shorter time spans of reduced eruptive frequency since first appearance of high-K volcanic rocks. Cyclic variations result from interplay of several magmatic processes)

Gertisser, R. & J. Keller (2003)- Trace element and Sr, Nd, Pb and O isotope variations in medium-K and high-K volcanic rocks from Merapi volcano, Central Java, Indonesia: evidence for the involvement of subducted sediments in Sunda Arc magma genesis. Journal of Petrology 44, 3, p. 457-489.
(online at: http://petrology.oxfordjournals.org/content/44/3/457.full.pdf+html)
(Merapi Holocene basalts-andesites medium-K affinity, high-K over past 1900 yrs, largely reflecting variable contributions from subducted sediment to mantle wedge which was similar to MORB-source mantle before subduction-related modification)

Gertisser, R., V.R. Troll & I.G.M.A. Nandaka (2023)- The scientific discovery of Merapi: from Ancient Javanese sources to the 21st century. In: R. Gertisser at al. (eds.) Merapi volcano- geology, eruptive activity, and monitoring of a high-risk volcano. Springer Nature, Berlin, p. 1-44.
(Extensive review of scientific discoveries on Merapi volcano in C Java, from records of ancient Javanese kingdoms until today)

Gertisser, R., V.R. Troll, T.R. Walter, I.G.M.A. Nandaka & A. Ratdomopurbo (eds.) (2023)- Merapi volcano- geology, eruptive activity, and monitoring of a high-risk volcano. Springer Nature, Berlin, p. 1-572.
(Collection of 18 review papers on Merapi volcano, C Java)

Giachetti, T., R. Paris, K. Kelfoun & B. Ontowirjo (2012)- Tsunami hazard related to a flank collapse of Anak Krakatau Volcano, Sunda Strait, Indonesia. In: J.P. Terry & J. Goff (eds.) Natural hazards in the Asia-Pacific region, Geological Society, London, Special Publ. 361, p. 79-90.
(Anak Krakatau volcano built on steep NE wall of 1883 Krakatau eruption caldera, and active on SW side, which makes edifice unstable. Hypothetical 0.280 km^3 flank collapse directed SW-wards would trigger initial wave 43m in height that would reach islands of Sertung, Panjang and Rakata in <1 min, with amplitudes from 15-30m. Waves would propagate across Sunda Strait, at 80-110/ hour. Tsunami would reach cities on Java W coast (Merak, Anyer, Carita) 35-45 min after onset of collapse, with amplitude from 1.5-3.4m)

Glicken, H., P. Asmoro, H. Lubis, D. Frank & T. Casadevall (1986)- The 1772 debris avalanche eruption of Papandayan Volcano, Indonesia, and hazard from future similar events. U.S. Geological Survey, Open File Report, p. 1-20. *(unpublished)*

Godang, S., S.P. Saputro & Huan Li (2024)- The slab failure in Central Java (Indonesia): New insight into its tectonic setting and origin. Solid Earth Sciences 9, 3, 100199, p. 1-15.
(online at: https://www.sciencedirect.com/science/article/pii/S2451912X24000370)
(Geochemistry of volcanic rocks of Sumbing-Slamet volcanoes, C Java, suggest involvement of subducted sediment input. Distinct geochemical signatures and magmatic interactions (supposedly) indicate link to slab tearing beneath C Java (as suggested by seismic tomography))

Gomez, C., M.A. Setiawan, N. Listyaningrum, S.B. Wibowo, D.S. Hadmoko, W. Suryanto, H. Darmawan et al. (2022)- LiDAR and UAV SfM-MVS of Merapi volcanic dome and crater rim change from 2012 to 2014. Remote Sensing (MDPI), 14, 5193. p. 1-10.
(online at: https://www.mdpi.com/2072-4292/14/20/5193/pdf?version=1666005978)
(Lidar and UAV datasets in 2012-2014 . Crater walls generally stable at 100–120 m above crater floor at N to ESE sector, and 40-80m in W and N. Opening of new vent on surface of lava dome displaced ~2 × 104 m3, corresponding to maximum −9 m vertically. Exploded material partly fallen within crater. Etc.)

Goode, L.R., H.K. Handley, S.J. Cronin & M Abdurrachman (2019)- Insights into eruption dynamics from the 2014 pyroclastic deposits of Kelut volcano, Java, Indonesia, and implications for future hazards. J. Volcanology Geothermal Research 382, p. 6-23.
(online at: https://www.sciencedirect.com/science/article/pii/S0377027318300623)
(Detailed review of pyroclastic deposits of 13 February 2014 explosive eruption of Kelut volcano, E Java)

Gourgaud, A., J.C. Thouret & J.L. Bourdier (2000)- Stratigraphy and textural characteristics of the 1982-1983 tephra of Galunggung volcano (Indonesia): implications for volcanic hazards. J. Volcanology Geothermal Research 104, p. 169-186.
(online at: https://hal-insu.archives-ouvertes.fr/hal-00093118/document)
(Galunggung volcano in W Java 9-month-long eruption in 1982-83 with phreatomagmatic phase with ash columns 20 km high. Magma composition evolved from andesite to primitive magnesian basalt, with progressive increase of ratio of xenoliths versus juvenile magma before increase of explosivity)

Grandjean, J.B. (1931)- Bijdrage tot de kennis der gloedwolken van den Merapi van Midden-Java. De Mijningenieur, Bandung, 1931, 12, p. 219-223.
('Contribution to the knowledge of pyroclastic flows of the Merapi of Central Java'. Eyewitnenss of 1931 pyroclastic flows from Merapi suggests not all are products of avalanching hot lava (as suggested by Kemmerling), but some are primary gas-rich eruptions)

Grilli, S.T., C. Zhang, J.T. Kirby, D.R. Tappin, S.F.L. Watt, J.E. Hunt, A. Novellino, S. Engwell et al. (2021)- Modeling of the Dec. 22nd 2018 Anak Krakatau volcano lateral collapse and tsunami based on recent field surveys: comparison with observed tsunami impact. Marine Geology 440, 106566, p. 1-26.
(manuscript online at: https://nora.nerc.ac.uk/id/eprint/531351/1/MARGO_AK_modeling_V9_lowres_drt.pdf)
(Dec. 22, 2018 lateral collapse of Anak Krakatau volcano in Sunda Straits discharged volcaniclastic material into 250m deep caldera SW of volcano and generated large tsunami, causing runups of up to 85m nearby and 13.5m on nearby coasts of Sumatra and Java. Tsunami caused 437 fatalities)

Gulyas, E. & P. Hederveri (1976)- Concentration of seismic energy within the two active domains beneath individual volcanoes and groups of volcanoes of Java, Indonesia. Tectonophysics 30, p. 129-140.
(Two seismically active domains under all individual active volcanoes of Java, separated by aseismic space)

Gunawan, H., C. Caudron, J. Pallister, S. Primulyana, B. Christenson, W. McCausland et al. (2017)- New insights into Kawah Ijen's volcanic system from the wet volcano workshop experiment. In: T. Ohba et al. (eds.) Geochemistry and geophysics of active volcanic lakes, Geological Society, London, Special Publ. 437, p. 35-56.
(online at: www.researchgate.net/publication/295907055_New_insights_into_Kawah_Ijens_volcanic_ Etc.)
(Volcanoes with crater lakes or extensive hydrothermal systems pose significant challenges for monitoring and forecasting eruptions. Lakes and hydrothermal systems serve as reservoirs for magmatic heat and fluid emissions. Experimental campaign/workshop at Kawah Ijen in 2014, designed to answer fundamental questions about how to improve monitoring and eruption forecasting at wet volcanoes)

Gunawan, R.M.P.P., G. Ikhwanushova, A. Harijoko, H.E. Wibowo & A. Setianto (2021)- Re-interpretation of distribution of Lautan Pasir caldera forming eruption products, Bromo-Tengger Caldera Complex, East Java. Proc. Int. Conf. Geological Engineering and Geosciences, Yogyakarta 2021, IOP Conference Series: Earth and Environmental Science 851, 012038, p. 1-8.
(online at: https://iopscience.iop.org/article/10.1088/1755-1315/851/1/012038/pdf)
(Distribution of scoria flow deposit related to caldera-forming eruption of Lautan Pasir caldera (youngest caldera in Bromo-Tengger caldera complex). Mainly distributed to NE, some also to S in Sapikerep valley, where two massive pyroclastic flow deposits are separated by lava flow)

Gurusinga, M.A., M. Abdurrachman, T. Ohba, T. Hoshide, W.N. Hamzah & I.A. Kurniawan (2025)- Lithofacies and juvenile clast variations at Ranu Grati Maar, East Java: Insights into eruptive transitions in monogenetic volcanoes. J. Volcanology Geothermal Research 467, 108426, p.
(Reconstruction of eruptive transitions and pre-eruptive magmatic condition of Ranu Grati in East Java, 60km SE of Surabaya and 24 km N of Tengger caldera-Semeru complex. One of largest maar volcanoes on Java.)

Gurusinga, M.A., T. Ohba, A. Harijoko & T. Hoshide (2023)- Characteristics of ash particles from the maar complex of Lamongan Volcanic Field (LVF), East Java, Indonesia: How textural features and magma composition control ash morphology. Volcanica (Strasbourg) 6, 2, p. 415-436.
(online at: https://www.jvolcanica.org/ojs/index.php/volcanica/article/view/213/326)
(Active Lamongan Volcanic Field, 145 km SE of Surabaya and E of Tengger caldera in E Java, surrounded by >30 'maar' calderas. Two distinct types of juvenile ash from maar eruptions: A (black and brown ash, heterogenous basaltic compositions) and B (orange-brown ash; fragmentation of basaltic andesite magma))

Habib, F., M. Abdurrachman & I. Setiawan (2018)- Vulcanostratigraphy and petrogenesis of Sundoro Volcano, Central Java. Proc. Annual Conv. Indonesian Association Geologists (PIT IAGI), Pekanbaru 2018, PIT18-0271, p. 1-7. *(Poster presentation)*, *(online at: https://www.researchgate.net/publication/328941517_VULCANOSTRATIGRAPHY_AND_PETROGEN Etc.)*
(Sundoro volcano with 28 units of lava flows and pyroclastic deposits, from five eruption centers. Similar magmatic series as nearby Sumbing Volcano, but less contaminated)

Hadikusumo, D. (1974)- The rise and drop of Mt. Kelut crater bottom after paroxysmal eruptions. Tectonophysics 23, 4, p. 341-347.
(Changes of Mt Kelut (E Java) crater bottom after last two eruptions: (1) 79m lowering after 1951 eruption; (2) 43m riset after 1966 eruption)

Hadisantono, R.Dalimin (1988)- Some aspects of the nature and origin of the widespread pyroclastic flow deposits (ignimbrite) surrounding Tangkubanparahu, Bandung, West Java. Thesis Diploma of Applied Science in Volcanology, Victoria University of Wellington, New Zealand, p. 1-62.

Hadisantono, R.Dalimin (1990)- The Sukapura and other ignimbrites in the Sapikerep valley and relationship to caldera formation of Bromo-Tengger volcanic complex, Probolinggo, East Java, Indonesia. M.Sc. Thesis Volcanology, Research School of Earth Science, Victoria University of Wellington, New Zealand, p. 1-207.
(online at: https://ir.wgtn.ac.nz/items/727054e7-77d7-4f55-b977-0fe53ecfc0cb)
(Bromo -Tengger caldera complex in E Java, with two calderas (Ngadisari 8x8 km, Sand Sea 6x7 km). Study of Sukapura ignimbrites, associated with caldera formation, and younger pyroclastic deposits and lava flows emplaced in Sapikerep valley. Pre caldera lavas ~265 ka and Sukapura Ignimbrite ~152ka. Other lava flows dated at 135 ka and 144ka. Geochemistry suggestive of island arc setting. Sukapura ignimbrite product of first caldera; pyroclastic flows from younger cone during post caldera period)

Hadisantono, R.D., S. Dirasutisna, A. Djuhara & A. Martono (1993)- Volcanic hazard map of Sundoro volcano, Central Java. Volcanological Survey of Indonesia, Bandung, 1:50,000.

Hammer, J.E., K.V. Cashman & B. Voight (2000)- Magmatic processes revealed by textural and compositional trends in Merapi dome lavas. J. Volcanology Geothermal Research 100, p. 165-192.

Hamzah, W.N., T Ohba, M.A. Gurusinga, M.L.A. Moktikanana, J.N. Indriyanto, T Hoshide, M. Abdurrahman et al. (2025)- Transition from magmatic to phreatomagmatic eruptions in Young Ciremai volcano, Indonesia: insights from stratigraphy, componentry, and textural analysis of tephra. Earth Planets and Space 77, 16, p. 1-25.
(online at: https://link.springer.com/content/pdf/10.1186/s40623-025-02143-7.pdf)
(Young Ciremai volcano, W Java,with phreatic–phreatomagmatic eruptions from 1698 to 1951, but previous eruptions likely exhibited both magmatic and phreatomagmatic fragmentations)

Handini, E., T. Hasenaka, N.D. Barber, T. Shibata & Y. Mori (2022)- Geochemistry of shield stage basalts from Baluran volcano, East Java, Sunda arc. J.Applied Geology (UGM) 7, 2, p. 64-82.
(online at: https://jurnal.ugm.ac.id/jag/article/view/76532/35746)
(Basaltic lava flows from shield stage of Baluran, a Quaternary volcanic center N of Ijen in rear of Sunda Arc in E Java, with abundant plagioclase, clinopyroxene, olivine, and minor magnetite. Resemble other medium-K calc-alkaline basalts from E Java's volcanoes but less enriched in light ion lithophile elements and Pb)

Handini, E., T. Hasenaka, N.D. Barber, T. Shibata, Y. Mori & A. Harijoko (2024)- Systematics of slab-derived components in Central Java, Sunda Arc: evidence for differential material transfer across the Southeast Asian convergent margin. Tectonophysics 873, 230229, p. 1-17.
(Modern volcanoes represent cycling of material and heat along subduction zone. C Java volcanoes in Sunda arc portion of SE Asian convergent system. C Java volcanoes inherit geochemistry from silicate melts that formed due to hydrous melting of subducting slab at depths of ~136-272 km. Across-arc variations for five volcanoes arranged in N-S lineament across C Java show decreasing ratio of sediment/ altered oceanic crust from volcanic front (Merapi volcano) to rear-arc (Muria). Farther from trench, signature of subducting oceanic plate increases, peaking at around ~160-170 km of slab depth)

Handini, E., T. Hasenaka, A. Harijoko & Y. Mori (2017)- Variation of slab component in ancient and modern Merapi products: a detailed look into slab derived fluid fluctuation over the living span of one of the most active volcanoes in Sunda Arc. J. Applied Geology (UGM) 2, 1, p. 1-14.
(online at: https://jurnal.ugm.ac.id/jag/article/view/30253/18263)
(Holocene eruptions of Merapi medium-K calc alkaline before 1900 years ago and high-K after that. Change attributed to increasing subducting sediment input as volcano matures. Ancient Merapi samples higher input of slab derived fluid (1.5 % of sediment derived fluid) than 2006 eruption of Modern Merapi (opposite of suggested trend))

Handini, E., I.W. Warmada, T. Hasenaka, N.D. Barber & T. Shibata (2022)- Geochemistry of arc alkaline magmatism of Java Island, Sunda Arc: a statistical review. Proc. 13th AUN/SEED-Net Regional Conference Geological and Geo-Resource Engineering (RCGEOE), Yogyakarta 2021, IOP Conference Series: Earth and Environmental Science 1071, 012013, p. 1-9.
(online at: https://iopscience.iop.org/article/10.1088/1755-1315/1071/1/012013/pdf)
(Alkaline magmatism developed in back arc area of Java (Sunda Arc), at different slab depths:~270-580 km in central section and ~150 km in E. Geochemical data from 4 alkaline volcanoes (Muria, Lasem, Bawean, Ringgit-Beser) suggests C Java alkalines highest K_2O and total alkali. Potassium and LILE enrichment independent of slab depth and more affected by arc segmentation in Java subduction zone)

Handley, H. (2006)- Geochemical and Sr-Nd-Hf-O isotopic constraints on volcanic petrogenesis at the Sunda arc, Indonesia. Ph.D. Thesis Durham University, p. 1-289.
(online at: http://etheses.dur.ac.uk/2670/)
(Geochem work on Salak, Gede, Idjen volcanoes shows progressive E-ward increase in Sr isotope ratio of volcanic rocks across W and C Java, broadly correlating with inferred lithospheric thickness (W Java thicker crust and more terrigenous signal of subducted sediment; E Java thin crust/ pelagic sediment). C- E Java transition may represent SE boundary of Sundaland (pre-Tertiary arc basement).

Handley, H.K., J. Blichert-Toft, R. Gertisser, C.G. Macpherson, S.P. Turner, A. Zaennudin & M. Abdurrachman (2014)- Insights from Pb and O isotopes into along-arc variations in subduction inputs and crustal assimilation for volcanic rocks in Java, Sunda arc, Indonesia. Geochimica Cosmochimica Acta 139, p. 205-226.
(online at: www.researchgate.net/publication/262690353_Insights_from_Pb_and_O_isotopes_into_alo Etc.)
(New Pb isotope data for volcanoes across Java (Gede, Salak, Galunggung, Merbabu, Merapi, Ijen). Negative correlation between Pb isotopes and SiO2, combined with mantle-like δ18O values in Gede explained by assimilation of-primitive arc rocks and/or ophiolitic crust known to outcrop in West Java. Peak in δ18O whole-rock and mineral values in C Java volcanic rocks (Merbabu and Merapi) combined with along-arc trends in Sr

isotope ratios suggest different or additional crustal assimilant of C Java volcanic rock, likely carbonate material. Strong E-to-W Java variations in Ba concentration attributed subducted source input)

Handley, H.K., J.P. Davidson, C.G. Macpherson & J.A. Stimac (2008)- Untangling differentiation in arc lavas: constraints from unusual minor and trace element variations at Salak Volcano, Indonesia. Chemical Geology 255, p. 360-376.
(online at: www.academia.edu/30316299/Untangling_differentiation_in_arc_lavas_Constraints_from Etc.)
(Volcanic rocks from Salak Volcano, W Java show different minor and trace element geochemistry between central vent group lavas and rocks erupted at side vents)

Handley, H.K., C.G. Macpherson & J.P. Davidson (2010)- Geochemical and Sr-O isotopic constraints on magmatic differentiation at Gede Volcanic Complex (GVC), West Java, Indonesia. Contributions to Mineralogy and Petrology 159, 6, p. 885-908.
(manuscript online at: https://dro.dur.ac.uk/7502/1/7490.pdf)
(Sr-O isotopic data provide constraints on relative importance of fractional crystallisation and magma mixing in petrogenesis, as well as on role and nature of arc crust. Geochemical character of W Java arc crust relatively immature compared to typical continental crust. Trace element ratios and Sr isotopes show magmatic source of older geographical units (Gegerbentang, Older Quaternary) distinct from other GVC groups)

Handley, H.K., C.G. Macpherson, J.P. Davidson and R. Gertisser (2006)- Along-arc heterogeneity in crustal architecture and subduction input at the Sunda arc in Java, Indonesia. Geochimica Cosmochimica Acta 70, 18, Suppl. 1 (Goldschmidt Conference Abstracts), p. A227.
(Sunda Arc lavas across Java. Sr ratios increase from Krakatau in W to Merapi in C Java, but lower further E. Correlation between Sr ratio and volcano summit elevation indicates relation to lithospheric thickness. Other isotope ratios for W Java volcanics consistent with incorporation of subducted sediment dominated by terrigenous component. E Java volcanics greater involvement of subducted pelagic sediment and stronger slab-fluid imprint. Along-arc variation reflects decreasing thickness of turbidite deposits on down-going Indian Ocean lithosphere from Sumatra to Java)

Handley, H.K., C.G. Macpherson, J.P. Davidson, K. Berlo & D. Lowry (2007)- Constraining fluid and sediment contributions to subduction-related magmatism in Indonesia: Ijen Volcanic Complex. Journal of Petrology 48, 6, p. 1155-1183.
(online at: https://academic.oup.com/petrology/article-pdf/48/6/1155/16668761/egm013.pdf)
(Ijen Volcanic Complex in E Java developed on thickened oceanic crust. Caldera complex 20 km wide with 22 post-caldera eruptive centers. 'Old Idjen' volcanics unconformable on Miocene limestone. Lavas geochemistry suggest Ijen is least contaminated mantle wedge source analysed in region. Indian-type mid-ocean ridge basalt (I-MORB) -like fertile mantle wedge first infiltrated by minor fluid from altered oceanic crust, prior to addition of <1% subducted Indian Ocean sediment (pelagic ooze and Mn-nodules))

Handley, H.K., M. Reagan, R. Gertisser, K. Preece, K. Berlo, L.E. McGee, J. Barclay & R. Herd (2018)- Timescales of magma ascent and degassing and the role of crustal assimilation at Merapi volcano (2006-2010), Indonesia: constraints from uranium-series and radiogenic isotopic compositions. Geochimica Cosmochimica Acta 222, p. 34-52.
(manuscript online at: http://eprints.gla.ac.uk/150854/7/150854.pdf)
(Isotopic data sets from 2006 and 2010 eruptions at Merapi volcano, C Java, indicate relatively rapid ascent of more undegassed magma responsible for more explosive behaviour in 2010)

Handley, H.K., S. Turner, C.G. Macpherson, R. Gertisser & J.P. Davidson (2011)- Hf-Nd isotope and trace element constraints on subduction inputs at island arcs: limitations of Hf anomalies as sediment input indicators. Earth Planetary Science Letters 304, p. 212-223.
(online at: www.researchgate.net/publication/251556907_Hf-Nd_isotope_and_trace_element_constr Etc.)
(New Nd-Hf isotope and trace element data for Javanese volcanoes, Hf anomaly variation may be controlled by fractionation of clinopyroxene or amphibole and does not represent magnitude or type of subduction input in some arcs)

Handyarso, A. (2022)- Ring-fault delineation of an ancient volcanic caldera based on 3-D gravity inverse modeling in Majenang Region, Indonesia. Kurvatek 7, 2, p. 103-114.
(online at: https://journal.itny.ac.id/index.php/krvtk/article/view/3197/1549)
(Circular anomaly pattern interpreted as ring-fault of ancient volcanic caldera, with eruption center around Majenang city)

Handyarso, A. (2023)- Caldera-like delineation and geological resources identification of Majenang Area, Indonesia by gravity and magnetic data inversions. Proc. 4th SE Asian Conference on Geophysics (SEACG 2022), Bandung, 2022, IOP Conference Series: Earth and Environmental Science 1227, 012027, p. 1-9.
(online at: https://iopscience.iop.org/article/10.1088/1755-1315/1227/1/012027/pdf))
(Circular anomaly on gravity-magnetic data interpreted as ancient volcanic caldera in area of Majenang city, C Java. Several high gravity anomalies within caldera rim interpreted as lava domes or intrusions)

Harijoko, A., R.M.P.P. Gunawan, H.E. Wibowo, N.I. Setiawan, E. Handini, W. Suryanto & E.T.W. Mei (2018)- Formation of Mount Loyang: Easternmost scoria cone of Slamet stratovolcano, Central Java, Indonesia. Proc. 7th Annual Symposium on Earthquake and Related Geohazard Research for Disaster Risk Reduction, Bandung 2017, AIP Conference Proceedings 1987, 1, 020063, p.
(Mount Loyang furthest scoria cone of Slamet volcano, ~14 km E of recent active Slamet crater)

Harijoko, A., N.A.S. Mariska & F. Anggara (2018)- Estimated emplacement temperatures for a pyroclastic deposits from the Sundoro volcano, Indonesia, using Charcoal Reflectance analyses. Indonesian J. on Geoscience (IJOG) 5, 1, p. 1-11.
(online at: https://ijog.geologi.esdm.go.id/index.php/IJOG/article/view/386/247)
(Maximum emplacement temperature of pyroclastic flows based on charcoal reflectance is 487°C)

Harijoko, A., G.I. Marliyani, H.E. Wibowo, Y.R. Freski & E. Handini (2023)- The geodynamic setting and geological context of Merapi Volcano in Central Java, Indonesia. In: R. Gertisser at al. (eds.) Merapi volcano-geology, eruptive activity, and monitoring of a high-risk volcano. Springer Nature, Berlin, p. 89-109.
(Merapi Quaternary stratovolcano in C Java part of Sunda-Banda subduction system. Recurring pattern of eruptive events, with 1-2 minor eruptions approximately every 4-5 years, interrupted by more violent (VEI 3–4) eruption episodes every few decades. Basement of Merapi Mio-Pliocene Sentolo Fm limestones and Oligo-Miocene volcanics of Nglanggran and Semilir Fms. Region dissected by larger fault systems (Progo, Muria, Opak River). Merapi and Merbabu-Telomoyo-Ungaran volcanoes follow NW-SE-trend, similar in orientation to regional fault systems. Etc.)

Harijoko, A., A.N.Milla, H.E. Wibowo & N.I. Setiawan (2020)- Magma evolution of Slamet Volcano, Central Java, Indonesia based on lava characteristic.Proc. 3rd Conf. Environmental Resources Management in Global Region, Gadjah Mada University, Yogyakarta 2019, IOP Conference Series: Earth and Environmental Science, 451, 012092, p. 1-17.
(online at: https://iopscience.iop.org/article/10.1088/1755-1315/451/1/012092/pdf)
(Slamet volcano in C Java second highest of Java (3428m). Quaternary basaltic stratovolcano, with volcanic products divided into Old Slamet (basalt-andesite, on W flank) and Young Slamet (more mafic, basaltic-basaltic andesite; E flank, still active today).Probably from different magma chambers)

Harijoko, A., S.A. Sari, H.E. Wibowo, N.I. Setiawan, M.L.A. Moktikanana (2021)- Stratigraphy, chronology, and magma evolution of Holocene volcanic products from Mt. Slamet deposited in the Guci Valley, Central Java, Indonesia. J. Volcanology Geothermal Research 418, 107341, p.
(online at: https://www.sciencedirect.com/science/article/abs/pii/S0377027321001700)
(In Guci valley (7-9 km from Slamet summit), four massive lavas, seven pyroclastic density current deposits, one scoria fall, and one lahar deposit. Two pyroclastic density current deposits (3-15 m thick) dated to 8040 and 3910 BP; third overlain by 8040 BP deposit. Guci Valley exposed to future eruptive activity)

Harijoko, A., R. Uruma, Wibowo, E. Haryo, L.D. Setijadji, A. Imai, K. Yonezu & K. Watanabe (2016)- Geochronology and magmatic evolution of the Dieng volcanic complex, Central Java, Indonesia and their relationships to geothermal resources. J. Volcanology Geothermal Research 310, p. 209-224.
(Dieng volcanic complex three volcanic episodes: (1) pre-caldera (>1 Ma), (2) second (0.3-0.4 Ma) and (3) youngest (after 0.27 M). Each episode distinct differentiation trends, indicating multiple shallow magma chambers)

Harijoko, A., H.E. Wibowo, M.L. Alifcanta, Moktikana & M.Y. Abdilla (2022)- Magma evolution of Lasem and Senjong Volcanic Complex. Indonesian J. on Geoscience (IJOG) 9, 1, p. 131-145.
(online at: https://ijog.geologi.esdm.go.id/index.php/IJOG/article/view/673/361)
(Lasem-Senjong Volcanic Complex one of four Quaternary volcanic complexes with high-K magmatism along N coast of C Java. Lasem stratovolcano 4 lava domes, 12 pyroclastic density flows (mainly N and E flanks) and 9 lava flows (S flank). Senjong Volcano 1 lava flow, 4 lava domes. Calc-alkaline rocks basaltic trachyandesite to trachyte. Magmas can be grouped into High K/Rb (Lasem) and Low K/Rb type (Senjong Volcano))

Harloff, Ch.E.A. (1931)- De uitbarsting van den Merapi in December 1930. Haagsch Maandblad 26, p. 384-397.
('The eruption of the Merapi in December 1930'. Popular magazine article by Dienst van den Mijnbouw geologist C. Harloff, describing the disastrous 18 December 1930 eruption of Merapi)

Harmon, R.S. & M.C. Gerbe (1992)- The 1982-83 eruption at Galunggung Volcano, Java (Indonesia): oxygen isotope geochemistry of a chemically zoned magma chamber. Journal of Petrology 33, 3, p. 585-609.
(online at: https://www.researchgate.net/publication/31404477_The_1982-83_Eruption_at_Galunggung_Volcano_Java_Indonesia_Oxygen_Isotope_Geochemistry_of_a_Chemically_Zoned_Magma_Chamber)
(Mt Galunggung in SW Java erupted four times in last two centuries. During most recent event in 1982-1983 305 million m3 of medium-K, calc-alkaline magma s erupted. Composition changed gradually during eruption from initial plagioclase (An60-75) and two-pyroxene andesites with ~58% SiO2 to final plagioclase (An85-90), diopside, and olivine (Fo85-90) bearing primitive magnesium basalts with ~47% SiO2. Eruption progressively tapped and drained magma chamber chemically stratified through extensive crystal fractionation)

Harpel, C.J., Kushendratno, J. Stimac, C.F. Avendano Rodríguez de Harpel & S. Primulyana (2019)- The Orange Tuff: a Late Pleistocene tephra-fall deposit emplaced by a VEI 5 silicic Plinian eruption in West Java, Indonesia. Bulletin of Volcanology 81, 33, p. 1-19.
(online at: https://link.springer.com/content/pdf/10.1007/s00445-019-1292-y.pdf)
(Orange Tuff marker bed around Salak volcano, SW of Bogor, typically 15-30cm thick, but 1-4 m thick on Salak flanks. Formed by VEI 5 dacite eruption of Gunung Salak between ~34 and 17 ky BP)

Hartmann, M. (1933)- Merapi- Bijdrage tot de kennis van gassen, sublimatie- en inkrustatieprodukten en thermale wateren in de Merapi ladoe's. Vulkanologische en Seismologische Mededeelingen, Dienst Mijnbouw Nederlandsch-Indie, Bandung, 12, p. 117-135.
(Merapi- Contribution to the knowledge of gases, sublimation and incrustation products and thermal waters in the Merapi ladu's' (nuee ardente avalanches of gas and blocks cloud). Appendix to Neumann van Padang description of Merapi eruptions of late 1930-1931, mainly characterized by common 6-12km long nuees ardentes several weeks after the formation of lava dome and lava flows (Hartmann joined Volcanological Survey department in Bandung in February 1932 and left due to budget cuts in January 1934))

Hartmann, M.A. (1934)- Die vulkanische Tatigkeit des Merapi Vulkanes (Mittel Java) in seinem ostlichen Gipfelgebiete zwischen 1902 und 1908. De Ingenieur in Nederlandsch-Indie (IV) 1, 5, p. IV.60- IV.73.
('The volcanic activity of the Merapi volcano (Central Java) in the east top area between 1902 and 1908'. Investigation of the eastern top of Merapi, after the major 1930 eruption)

Hartmann, M. (1934)- Der grosse Ausbruch des Vulkanes G. Merapi (Mittel Java) im Jahre 1872. Natuurkundig Tijdschrift voor Nederlandsch-Indie 94, 3, p. 189-209.
(online at: https://resolver.kb.nl/resolve?urn=MMTEY01:179531004:pdf)

('The large eruption of the G. Merapi volcano (Central Java) in the year 1872'. Description of one of largest and previously poorly documented eruption in 1872, which created the current main crater of Merapi)

Hartmann, M. (1935)- Beobachtete Eruptionsregen wahrend vulkanischer Ausbruche in Niederlandisch-Indien. I. Krakatau. II. Merapi (M.J.). De Ingenieur in Nederlandsch-Indie (IV) 2, 3, p. IV.19- IV.22.
(online at: https://www.stichtingblauwelijn.nl/assets/files/1935-03.pdf)
('Observed eruption rains during volcanic eruptions in the Netherlands Indies, I. Krakatau, II. Merapi (Central Java')

Hartmann, M. (1935)- Die gross Ausbruchsperiode des Merapi ins 2 Halbjahr 1934. Zeitschrift fur Vulkanologie 16, p. 199-205.
('The major eruption period of the Merapi into the second half of the year 1934'. After explosive phase of Merapi in Jan.-Febr. 1934, second and third phase followed in May and June. Significant lava dome formed, which partly collapsed in November, causing 7km long nuee ardente)

Hartmann, M. (1935)- Die Ausbruche des Gunung Merapi (Mittel-Java) bis zum Jahre 1883. Neues Jahrbuch Mineralogie Geologie Palaontologie, Beilage Band 75, B, 1, p. 127-162.
('The eruptions of Gunung Merapi (Central Java) until the year 1883'. With proposed classification of eruptions into 4 types, A, B, C and D, in order of increasing explosivity)

Hartmann, M. A. (1936)- Die Lavadomgebilde des Merapi (M. J.) nach dem grossen Ausbruch im Jahre 1930. Zeitschrift fur Vulkanologie 16, 4, p. 248-258.
('The lava dome formations of the Merapi (C Java) after the major eruption in the year 1930')

Hartmann, M. (1936)- Die Streitfrage uber die Ursachen, welche die beobachteten Eruptionsregen bei dem Ausbruch des Krakatau am 1. und 2. Mai 1933, sowie des G. Merapi (Mittel-Java) am 10. Juli 1934 ausgelost haben. De Ingenieur in Nederlandsch-Indie (IV) 3, 2, p. IV.29- IV.35.
(online at: https://www.stichtingblauwelijn.nl/assets/files/1936-02.pdf)
('The debate on the causes of observed eruption rains at Krakatau (1933) and Merapi (1934)')

Hartmann, M.A. (1938)- Die Vulkangruppe im Sudwesten des Salak-Vulkans in West Java. Natuurkundig Tijdschrift voor Nederlandsch-Indie 98, 4, p. 215-249.
(online at: http://62.41.28.253/cgi-bin/...)
('The group of volcanoes SW of the Salak volcano in W Java'. Rel. detailed descriptions of 4 Recent volcanoes SW of Salak, from NE to SW: Perbakti, Endoet-Wajang, Kiaraberes and Gagak. Between 1935 and 1938 Hartmann climbed to the SW Salak crater areas several times (p. 237))

Hartmann, M.A. (1939)- De Goenoeng Salak in West Java. De Tropische Natuur 28, 11, p. 177-188.
(online at: https://natuurtijdschriften.nl/pub/511518/TN19390280011001.pdf)
(Popular, yet thorough description of Salak volcano complex near Bogor, W Java, by Swiss Max Hartmann, a chemist/ agrogeologist with Bandung Volcanological Survey in early 1930s. Last significant eruption of Salak was in 1699)

Hartono, U. (1994)- The petrology and geochemistry of the Wilis and Lawu volcanics, East Java, Indonesia. Ph.D. Thesis University of Tasmania, Australia, p. 1-441.
(online at: http://eprints.utas.edu.au/15767/2/1Hartono_whole_thesis.pdf)
(Eruptive products of Wilis Volcanic Complex in E Java five groups, from old to young: (1) pre-caldera Klotok basalt and basaltic andesite (K-Ar ages ~1.7-1.9 Ma), (2) pre-caldera Pawonsewu andesite, (3) the Ngebel Lake caldera high-Si andesite and dacite (pumice), (4) post-caldera Jeding basalt-andesite and (5) post-caldera Argokalangan crater andesite (mainly lahars). Lawu Volcanic complex 2 groups: (1) Old Lawu with hornblende-andesites, (2) Young Lawu with olivine-bearing andesites. Wilis more typical of 'Bali sector' of Sunda-Banda Arc (underlain by oceanic crust?); Lawu typical of W Java sector of Sunda-Banda arc)

Hartono, U. (1994)- Magma source characteristics in the Wilis Volcano, Eastern Sunda Arc: trace element and Sr and Nd Isotope constraints. Proc. 23rd Annual Conv. Indonesian Association Geologists (IAGI), Jakarta, 1, p. 250-270.
(online at: https://www.iagi.or.id/web/digital/62/24.pdf)
(Wilis Volcanic Complex in E Java medium-K arc volcanics, varying from basalts to andesites to dacites. Underlying mantle wedge with MORB characteristics. High Ba may be from sediments of subducting plate)

Hartono, U. (1994)- The olivine, pyroxene and amphibole chemistry from the Wilis volcano complex, East Jawa: implications for temperatures andpressures of the magma. Jurnal Geologi dan Sumberdaya Mineral (JGSM) 4, 37, p. 7-19.
(Pyroxenes from Wilis basalt and andesite crystallized at T of 1150°C and 947°C respectively. Amphiboles from Wilis volcano dacite crystallized at pressure of ~5 kb)

Hartono, U. (1994)- Radiogenic and stable isotope data from the Wilis volcanic complex, East Java. Jurnal Geologi dan Sumberdaya Mineral (JGSM) 4, 39, p. 8-15.
(Sr, Nd and O-isotope analyses of Quaternary volcanics of Wilis volcano, SE Java)

Hartono, U. (1995)- Oxygen isotope variations from the Wilis volcanic complex, East Java: evidence for assimilation and fractional crystallization. Jurnal Geologi dan Sumberdaya Mineral (JGSM) 5, 43, p. 2-7.
(On 18O oxygen isotopes in Quaternary volcanics of Wilis Complex, E Java)

Hartono, U. (1995)- The major trace and rare earth elements geochemistry of the Lawu volcano, Central Java. Jurnal Geologi dan Sumberdaya Mineral (JGSM) 5, 50, p. 12-29.
(Rocks from extinct Quaternary Lawu volcano typical calc-alkalic subduction volcanics (mainly andesites, minor dacites). Higher K2O and other incompatible elements in Young Lawu rocks may indicate crustal contamination)

Hartono, U. (1995)- Petrography and mineral chemistry of the Lawu volcano, Central Java. Jurnal Geologi dan Sumberdaya Mineral (JGSM) 6, 52, p. 12-32.
(Quaternary lavas of Lawu volcano, C Java, mainly basaltic andesite to dacite. Mineralogical differences between 'Old Lawu' and Young Lawu': Young Lawu with olivine phenocrysts)

Hartono, U. (1996)- Stratigraphic geochemical trends of the Wilis volcanic complex, Eastern Sunda arc: implication for magma evolution. Bull. Geological Research Development Centre (GRDC) 19, p. 97-133.
(Wilis volcano, SE Java, five episodes of basaltic-andesitic volcanism, showing evolution from intitial poorly evolved basalts to more evolved andesitic magmas to finally dacitic magmatism)

Hartono, U. (1996)- Sr, Nd and O Isotope constraints on the petrogenesis of the island arc Wilis volcanics. Proc. 25th Annual Conv. Indonesian Association Geologists (IAGI), Bandung, p. 233-249.

Hartono, U. (1997)- Petrogenesis of basaltic magmas from the Wilis volcano, Eastern Sunda Arc. Bull. Geological Research Development Centre (GRDC), Bandung, 21, p. 39-62.
(Wilis extinct Quaternary volcano at border C-E Java with basalts high in Al2O3, low MgO, enriched in K-group elements (Ba, Rb, K), etc. Probably fractionation product from primary magma resulting from melting of MORB-like mantle wedge above subducting slab. May have begun to crystallize at depth of ~30 km. Ba and Sr concentrations in Wilis basalts significantly higher than in avarage Java tholeiite and island arc tholeiite, possibly indicating involvement of young subducted terrigenous sediments)

Hartono, U. (1997)- Basaltic andesites resulted from the reaction between hydrous basaltic magmas and anhydrous ferromagnesian minerals: evidence from the Lawu volcano, Central Java. Jurnal Geologi dan Sumberdaya Mineral (JGSM) 7, 69, p. 2-10.
(Lawu volcano two parts, Old Lawu and Young Lawu. Both dominated by basaltic andesites and andesites, but Young Lawu contains olivine. Crystallization of amphibole of Old Lawu at ~18km depth)

Hartono, U. (1999)- Fractional crystallization and the origin of compositional gap between basaltic andesite and silicic rocks in the Wilis magmatism. Jurnal Geologi dan Sumberdaya Mineral (JGSM) 9, 90, p. 2-8.

Hartono, U. & A. Achdan (1993)- Possible sediment involvement in the Wilis magmatism: a preliminary study. Jurnal Geologi dan Sumberdaya Mineral (JGSM) 3, 27, p. 2-7.
(Basalts from extinct Quaternary Wilis volcano, Central-East Java have high Ba50 and Ba/La ratios and Sr and Nd isotope ratios that suggest contribution to magma source from subducted slab sediments (1% of sediment added to Indian Ocean MORB source will give observed Sr and Nd anomalies))

Hartono, U. & Baharuddin (1986)- Morfostratigrafi batuan gunungapi Wilis. Proc.15th Annual Conv. Indonesian Association Geologists (IAGI), Yogyakarta, 2, p. 1-26.
(online at: https://www.iagi.or.id/web/digital/44/PIT-IAGI-1986-Vol-2-Paper-31.pdf)
('Morphostratigraphy of the Wilis volcanics', East Java).

Hartung, M.A. (1938)- Die Vulkangruppe im Sudwesten des Salak-vulkans in West-Java. Natuurkundig Tijdschrift voor Nederlandsch-Indie 98, 4, p. 215-249.
(online at: http://colonial.library.leiden.edu/)
('The volcano group in the SW of the Salak volcano in W Java'. Descriptions of Recent volcanoes Perbakti, Endut, Kiaraberes, Gagak)

Heim, A. (1916)- Auf dem Vulkan Smeru auf Java. Neujahrsblatt Naturforschenden Gesellschaft Zurich 1916, 118, p. 1-15.
(online at: http://www.ngzh.ch/media/njb/Neujahrsblatt_NGZH_1916.pdf)
('On the Semeru volcano on Java'. Early report on ascent of Semeru volcano in E Java in November 1911, with Ir. F. van Gogh. Recorded several small eruptions with eruption cloud reaching 10km high. Active eruption center of Semeru shifting S-ward. First European to climb Semeru probably F. Junghuhn in September 1844)

Hidayati, S., A. Basuki, Kristianto & I. Mulyana (2009)- Emergence of lava dome from the crater lake of Kelud Volcano, East Java. Jurnal Geologi Indonesia 4, 4, p. 229-238.
(online at: www.bgl.esdm.go.id/publication/index.php/dir/article_download/255)
(On volcanic activity of Kelud Volcano, E Java in 2007, with creation of lava dome in crater)

Hirawan, A., A.S.V. Bangun, R.B. Pratiwi & A.D. Titisari (2017)- Characteristics of basaltic pillow lava in Jarum Village, Bayat: magma evolution and petrogenetic model. Proc. Seminar Nasional Kebumian 10, Universitas Gadjah Mada, Yogyakarta, p. 1395-1413.
(online at: https://repository.ugm.ac.id/274252/1/OVK-08.pdf)
(Geochemistry of Oligocene basaltic pillow lavas in Jarum Village, Central Java, and Pendul Hill gabbroic-dioritic intrusion in Jiwo Hills 3 km to N suggests these are late and early stages of same magmatism)

Hirschi, H. (1925)- Die Radioaktivitat des Shoshonits von Bromo (Java) und Shonkinits vom Pik von Maros (Celebes). Verhandelingen Geologisch-Mijnbouwkundig Genootschap Nederland Kolonien, Geologische Serie 8 (Gedenkboek Verbeek, memorial volume), p. 213-218.
(online at: https://books.google.com/books?id=Yy0RAAAAIAAJ&pg)
('The radioactivity of the shoshonite of Bromo (Java) and the shonkinite of Maros Peak (SW Sulawesi)'. Found relatively low contents of radioactive materials)

Horner, L. (1837)- Geologische gesteldheid van de vulkaan Gede op Java. Verhandelingen Bataviaasch Genootschap Kunsten Wetenschappen 17, 1, p. 3-28. *(online at: https://ia801900.us.archive.org/35/items/verhandelingenv171839bata/verhandelingenv171839bata.pdf)*
('Geological condition of the Gede volcano on Java'. Some of first elementary geologic observations of G. Gede volcano, by Swiss member of the Commission of Natural Sciences, Ludwig Horner)

Houwink, L. (1901)- Verslag van een onderzoek naar aanleiding van de uitbarsting van den vulkaan Keloet in den nacht van den 22e op den 23e Mei 1901. Jaarboek Mijnwezen Nederlandsch Oost-Indie 30 (1901), p. 122-136.
('Results of an investigation after the eruption of the Kelud volcano in the night of 22-23 May'. Much devastation of forest around volcano, with lahar flows towards Blitar fed by water from crater lake. Lake water still boiling. After eruption lake much reduced in size. With map of ash distribution across most of Java)

Hunt, J.E., D.R. Tappin, S.F.L. Watt, S. Susilohadi, A. Novellino, S.K. Ebmeier, M. Cassidy, S.L. Engwell et al. (2021)- Submarine landslide megablocks show half of Anak Krakatau island failed on December 22nd, 2018. Nature Communications 12, 2827, p. 1-15.
(online at: https://www.nature.com/articles/s41467-021-22610-5.pdf)
(Anak Krakatau lateral flank collapse on December 22, 2018, generated submarine blocky landslide deposit (0.214± 0.036 km^3), emplaced over 1.5 km into adjacent basin)

Hurlbut, G.C.& R.D.M. Verbeek (1887)- Krakatau, a narrative by George H. Hurlbut, from the study of R.D.M. Verbeek. J. American Geographical Society of New York 19, p. 233-253.
(online at: https://www.jstor.org/stable/196734)
(Elegant early English-language summary of 1883 Krakatau eruption, based on works of Verbeek (1885, 1886)

Ibrahim, K., S. Bijaksana, M. Abdurrachman, D.P. Sahara, P.B. Suryanata, S. Zulaikah et al. (2025)- Contrasting magmatic structures and tectonic controls from integrated gravity and magnetic data in the Bromo–Tengger–Semeru complex and the Lamongan Volcanic Field, East Java, Indonesia. J. Volcanology Geothermal Research 468, 108455, p.
(Gravity and magnetic study of Bromo-Tengger-Semeru complex and Lamongan Volcanic Field)

Indriyanto J.N. (2023)- Eruptive history, magma dynamic, and magmatic process of effusive-explosive transition at Kelud volcano, Indonesia. Doctoral Thesis Akita University, Japan, p. 1-214.
(online at: https://air.repo.nii.ac.jp/record/6122/files/shihakukou1440.pdf)
(Volcanic stratigraphy for last 1300 years of activity at Kelud volcano in E Java. Ten bedsets composed of pyroclastic density current and tephra fallout deposits identified. Focus on basaltic andesite products from effusive and explosive events in 2007-2008 and 2014)

Indriyanto J.N., T. Ohba, T. Hoshide, S.S. Angkasa & M. Abdurrachman (2022)- Eruptive history of the last-1300-years activity of Kelud volcano, Indonesia: Inferences from stratigraphy, chronology, sedimentology, componentry, and geochemistry. J. Volcanology Geothermal Research 433, 107723, p. 1-20.
(Kelud one of deadliest volcanoes in Indonesia. Volcanic stratigraphy for last 1300 years of activity subdivided into 10 bed-sets composed of Pyroclastic Density Current and Tephra Fallout deposits between ~1300 and 100 yrs B.P. One of units may be from 1481 C.E. eruption. Fallout layers generally thin, derived from short-sustained eruption columns. PDC deposits massive to stratified. Kelud capable of producing wide spectrum of eruptions. Increasing eruptive frequency over time)

Innocenti, S. (2006)- Lavas and tephras of Merapi Volcano, Java, Indonesia: insights from textural analyses and geochemistry. M.Sc. Thesis, Pennsylvania State University, p. 1-210. *(Unpublished)*
(online at: https://etda.libraries.psu.edu/paper/7396)
(Merapi volcano activity produces lava flows and viscous lava domes and explosive events. Evidence in support of multiple distinct plumbing systems. Varying proportions of subducted sediment and subducted crustal fluids can explain repeated shifts between medium- and high-K affinity (also displayed by other volcanoes in Java). Formation of viscous plug responsible for shift between effusive and explosive eruptions)

Innocenti, S., S. Andreastuti, T. Furman, M.A. del Marmol & B. Voight (2013)- The pre-eruption conditions for explosive eruptions at Merapi volcano as revealed by crystal texture and mineralogy. J. Volcanology Geothermal Research 261, p. 69-86.
(online at: www.researchgate.net/publication/260703169_The_pre-eruption_conditions_for_explosive_eruptions_at_Merapi_volcano_as_revealed_by_crystal_texture_and_mineralogy)

(Merapi tephra and lavas resided for similar lengths of time in mid-crustal reservoir, before ascending to surface and erupt explosively (tephra), or stagnate in shallow magma chamber before extrusion (lava))

Innocenti, S., M.A. del Marmol, B. Voight, S. Andreastuti, T. Furman (2013)- Textural and mineral chemistry constraints on evolution of Merapi Volcano, Indonesia. J. Volcanology Geothermal Research 261, p. 20-37.
(Textures of Merapi lavas, from Proto-Merapi through modern activity, suggests distinct histories for basalts and basaltic andesites, associated with different rheological behaviors and storage/transport systems)

Islamey, N.A.B., H.E. Wibowo & N.I. Setiawan (2024)- Xenolith petrography for identification of substratum lithology of an active volcano: a case study of Lava Kekep, Sundoro Volcano, Central Java. Proc. Int. Conf. Geological Engineering and Geosciences, Yogyakarta 2023, IOP Conference Series: Earth and Environmental Science 1373, p. 012069, p. 1-10.
(online at: https://iopscience.iop.org/article/10.1088/1755-1315/1373/1/012071/pdf)
(xenoliths embedded in basaltic lava of the Kekep parasitic cone of Sundoro volcano, W of Merapi, C Java, include sedimentary (siltstone) and igneous rocks (dunite, pyroxenite and lherzolite). Substrate lithology likely composed of Tertiary sediments in upper part, with granitoid- gabbroic diorite crustal material in lower part, and with ultramafic crustal material. Similarities with rocks in Luk-Ulo melange complex)

Ismail, T, M. Abdurrachman, Y. Rizal & K. Hardjawidjaksana (2020)- Volcanostratigraphy of Krakatoa islands, South Lampung District, Lampung Province. Proc. 3rd Int. Conf. Transdisciplinary Research on Environmental Problems in SE Asia, Gorontalo 2018, IOP Conference Series: Earth and Environmental Science 589, 012010, p. 1-22.
(online at: https://iopscience.iop.org/article/10.1088/1755-1315/589/1/012010/pdf)
(Volcanostratigraphy of Krakatoa island shows 29 rock units, representing Old Krakatoa, Young Krakatoa and Anak Krakatoa. Krakatoa history of two caldera developments, in 416 AD and 1883 AD)

Ismail, T, M. Abdurrachman, Y. Rizal, K. Hardjawidjaksana & R. Arbie (2020)- The influence of rock resistance for geomorphology of Krakatau Islands, South Lampung District, Lampung Province. Proc. 3rd Int. Conf. Transdisciplinary Research on Environmental Problems in SE Asia, Gorontalo 2018, IOP Conference Series: Earth and Environmental Science 589, 012011, p. 1-12.
(online at: https://iopscience.iop.org/article/10.1088/1755-1315/589/1/012011)

Jaxybulatov, K., I. Koulakov, M. Ibs-von Seht, K. Klinge, C. Reichert, B. Dahren & V.R. Troll (2011)- Evidence for high fluid/melt content beneath Krakatau volcano (Indonesia) from local earthquake tomography. J. Volcanology Geothermal Research 206, p. 96-105.
(online at: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.727.4142&rep=rep1&type=pdf)
(Tomographic inversion for P and S velocities from 2005-2006 microseismic network shows zone of high Vp/Vs ratio beneath Krakatau complex, a probable indicator of partially molten or high fluid content material, with composition corresponding to deeper layers. Anomaly appears to be separated in two parts at depth of 5-6 km)

Jeffery, A.J., R. Gertisser, V.R. Troll, E.M. Jolis, B. Dahren, C. Harris et al. (2013)- The pre-eruptive magma plumbing system of the 2007-2008 dome-forming eruption of Kelut volcano, East Java, Indonesia. Contributions to Mineralogy and Petrology 166, p. 275-308.
(online at: https://www.academia.edu/75392094/The_pre_eruptive_magma_plumbing_system_of_the_2007_2008_dome_forming_eruption_of_Kelut_volcano_East_Java_Indonesia)
(Kelut 2007-2008 lava dome provides evidence for complex magma system that comprises deep crustal, mid-crustal storage and upper crustal storage zones)

Jhonny, B. Priadi & R. Mulyana (2006)- Continental characters on volcanism of Lamongan volcano, East Java. Proc. 35th Annual Conv. Indonesian Association Geologists (IAGI), Pekanbaru, 1 p. *(Abstract only)*
(online at: https://www.iagi.or.id/web/digital/15/2006_IAGI_Pekan-Baru_-Continental-Characters-On.pdf)
(Lamongan is small volcano between Bromo-Tengger and Iyang volcanic ranges in E Java. Basalt, basanite, basaltic-andesite, trachyandesite, absarokite and shosonite suggest magmatic affinity transitional between

alkaline and calc-alkaline. Mix of subduction and continental magma character suggests basement of Lamongan Volcano may represent a microcontinent)

Joly, J. (1885)- XXXII- Notes on the microscopical character of the volcanic ash from Krakatoa. Scientific Proc. Royal Dublin Society, new series, 4, p. 291-299.
(Description of volcanic ash that fell on deck of Norwegian barque Borjild, anchored 75 miles NE of Krakatoa, from 6 am until 6 pm on 27 August 1883. Also fragments of floating pumice. Ash mainly fragments of pumice, also small crystals of magnetite, pyrite, pyroxene (hypertshene dominant over augite) and feldspar (mainly plagioclase))

Jousset, P., A. Budi-Santoso, A.D. Jolly, M. Boichu, Surono, S. Dwiyono et al. (2013)- Signs of magma ascent in LP and VLP seismic events and link to degassing: an example from the 2010 explosive eruption at Merapi volcano, Indonesia. J. Volcanology Geothermal Research 261, p. 171-192.

Jousset, P., S. Dwipa, F. Beauducel, T. Duquesnoye M. Diament (2000)- Temporal gravity at Merapi during the 1993-1995 crisis: an insight into the dynamical behaviour of volcanoes. J. Volcanology Geothermal Research 100, p. 289-320.
(online at: http://www.ipgp.jussieu.fr/~beaudu/download/jvgr96.pdf)
(During 1993-1995 activity of Merapi volcano, C Java, little deformation (<5 cm), but significant gravity changes, explained mostly by growth of lava dome)

Jousset, P., J. Palister & Surono (2013)- The 2010 eruption of Merapi volcano. J. Volcanology Geothermal Research 261, p. 1-6.
(October-November 2010 eruption of Merapi volcano in C Java was largest eruption in >100 years, at volcano known for smaller eruptions occurring on average every 4-6 years)

Junghuhn, F.W. (1843)- Bijdragen tot de geschiedenis der vulkanen in den Indischen Archipel, Eerste afdeeling Java. I. Goenoeng Salak, II. Goenoeng Pangerango, III. Goenoeng Gede. Tijdschrift voor Nederlands Indie 5, 1, p. 97-133.
(online at: http://resolver.kb.nl/resolve?urn=dts:2783002:mpeg21:pdf)
('Contributions to the history of volcanoes in the Indies Archipelago, First part Java, I. Gunung Salak, II. Gunung Pangerango, III. Gunung Gede'. Early descriptions of Java volcanoes)

Junghuhn, F.W. (1843)- Bijdragen tot de geschiedenis der vulkanen in den Indischen Archipel, Eerste afdeeling Java. IV. Tangkoebang Prauw, V. Patoeha, VI. Malabar, VII. Waijang, VIII-IX. Goenoeng Goentoer, X. Kawa Manok, XI. Papandaijang. Tijdschrift voor Nederlands Indie 5, 1, p. 185-227.
((online at: http://resolver.kb.nl/resolve?urn=dts:2783002:mpeg21:pdf)
('Contributions to the history of volcanoes in the Indies Archipelago, First part Java, IV, Tangkuban Perahu, V Patuha, VI Malabar, VII Waijang, VIII-IX Gunung Guntur, X Kawa Manok, XI Papandayang'. First of many continuations of above)

Junghuhn, F.W. (1843)- Bijdragen tot de geschiedenis der vulkanen in den Indischen Archipel, Eerste afdeeling Java, XII. Telaga Bodas, XIII, Galoeng Goeng. Tijdschrift voor Nederlands Indie 5, 1, p. 257-280.
('Contributions to the history of volcanoes in the Indies, etc. XII Telaga Bodas, XIII Galunggung')

Junghuhn, F.W. (1843)- Bijdragen tot de geschiedenis der vulkanen in den Indischen Archipel, Eerste afdeeling Java, XIV. Tjerimai. Tijdschrift voor Nederlands Indie 5, 1, p. 614-626.
('Contributions to the history of volcanoes in the Indies, etc. XIV Ciremai')

Junghuhn, F.W. (1843)- Bijdragen tot de geschiedenis der vulkanen in den Indischen Archipel, Eerste afdeeling Java, XV. Slamat. Tijdschrift voor Nederlands Indie 5, 1, p. 745-763.
('Contributions to the history of volcanoes in the Indies, etc. XV Slamet')

Junghuhn, F.W. (1844)- Bijdragen tot de geschiedenis der vulkanen in den Indischen Archipel, Eerste afdeeling Java, XVI Radja Djampangang, XVII. Het gebergte Dieng. Indisch Magazijn 1844, 4-6, p. 41-83 and p. 163-176.
('Contributions to the history of volcanoes in the Indies, etc., XVI Raja Jampangang, XVII The Dieng Plateau')

Junghuhn, F.W. (1844)- Bijdragen tot de geschiedenis der vulkanen in den Indischen Archipel, Eerste afdeeling Java, XVIII. Goenoeng Sindoro. Indisch Magazijn 1844, 4-6, p. 287-315.
('Contributions to the history of volcanoes in the Indies, etc., XVIII Gunung Sindoro')

Junghuhn, F.W. (1844)- Bijdragen tot de geschiedenis der vulkanen in den Indischen Archipel, Eerste afdeeling Java, XIX. Goenoeng Soembing. Indisch Magazijn 1844, 7-9, p. 64-94.
(Final part of 'Contributions to the history of volcanoes in the Indies Archipelago, First part Java, XIX Gunung Sumbing'. Series not completed as originally intended)

Juwarna, H., A.D. Wirakusumah, D. Soetoyo & S. Bronto (1986)- Geological map of Galunggung volcano, West-Java (scale 1:10,000). Volcanological Survey of Indonesia, Bandung.

Kartadinata, M.N., M. Okuno, T. Nakamura & T. Kobayashi (2002)- Eruptive history of Tangkuban Perahu Volcano, West Java, Indonesia: a preliminary report. J. of Geography (Chigaku Zasshi) 111, 3, p. 404-409.
(online at: www.jstage.jst.go.jp/article/jgeography1889/111/3/111_3_404/_article/-char/en)
(Tangkuban Perahu volcano, N of Bandung, tephra group divided into two subgroups: (1) Old Tangkuban Perahu (oldest radiometric date ~40,750 years) and (2) Young Tangkuban Perahu (started at ~10,000 BP))

Katili, J.A. & A. Sudradjat (1984)- Galunggung the 1982-1983 eruption. Volcanological Survey Indonesia, Bandung, p. 1-102.

Kausar, A.A., I. Setiawan, A. Yuliyanti, L. Lintjewas, J. Jakah & W. Herawan (2024)- Geochemical characteristic of volcanic rocks in the Karaha- Talagabodas fields related to Galunggung Volcano. Riset Geologi dan Pertambangan (BRIN) 34, 1, p. 25-40.
(online at: https://jrisetgeotam.brin.go.id/index.php/jrisgeotam/article/view/1279/pdf)
(Karaha and Telaga Bodas solfatara fields/ geothermal systems near Galunggung volcano in W Java. Associated volcanic rocks pyroxene andesite, basaltic andesite, basalt, altered pyroclastics and tuff breccia)

Kavalieris, I. (1994)- High Au, Ag, Mo, Pb, V and W content of fumarolic deposits at Merapi Volcano, Central Java, Indonesia. J. Geochemical Exploration 50, p. 479-491.
(Blue and red-green sublimates incrustations deposited in 1991 around high T (800°C) fumaroles at Merapi volcano. Blue sublimates comprise thin coating of Mo oxide on cristobalite-alunogen-anbydrite. They contain up to 3% Mo, 1.64% Pb and many other metallic elements. Related to ascent of new magma and degassing at depths of 2 km or less below the summit of volcano. High T fumarolic activity may form 'false'" anomalies of key elements such as Au, unrelated to hydrothermal fluids with potential for commercial mineralization)

Keil, K.F.G. (1933)- Uber das Vorkommen von leucitreichem Basalt am Gunung Ringgit (Java). Centralblatt Mineralogie Geologie Palaontologie 1933, A, p. 245-249.
('On the occurrence of leucite-rich basalt at the Ringgit volcano, Java'. Ringgit is extinct volcano center E of Arjuno- Welirang complex in East Java. Young basalts with leucite crystals up to 3 cm in size and locally up to 50% of rock (leucitite))

Keil, K.F.G. (1934)- Der Goenoeng Ringgit und seine oeconomische Bedeutung fur Indien. Geologie en Mijnbouw 12, 10, p. 107-111.
(online at: https://drive.google.com/file/d/1ETrjybO5gbdeTW73Dk60S3uFmmcxEAUf/view(
('The Gunung Ringgit and its economic significance for the Netherlands Indies'. Leucite-rich basaltic volcanics of Ringgit volcano in easternmost Java are potential economically significant source of K_2O for fertilizer or glass manufacturing)

Kelfoun, K., A.B. Santoso, T. Latchimy, M. Bontemps, I. Nurdien, F. Beauducel, A. Fahmi, R Putra et al. (2021)- Growth and collapse of the 2018-2019 lava dome of Merapi volcano. Bulletin of Volcanology 83, 2, p.
(manuscript online at: www.researchgate.net/publication/348577177_Growth_and_collapse_of_the_2018-2019_lava_dome_of_Merapi_volcano)
(Evolution of 2018−2019 lava dome of Merapi volcano and associated pyroclastic density currents. Dome developed on plateau flanked by steep sides (~40°--50°) inside crater open to SE. Dome viscous on gentle slopes and brittle on slopes >35°, thus unable to grow on outer slopes of plateau, resulting in small and frequent collapses)

Kemmerling, G.L.L. (1919)- De Kloetramp. De Ingenieur 34, 44, p. 804-813.
(online at: https://www.delpher.nl/nl/tijdschriften/view?identifier=MMTEY01:179524003:00005)
('The Kelud disaster' of 1919))

Kemmerling, G.L.L. (1921)- De geologie en geomorphologie van den Idjen. In: Het Idjen Hoogland, Koninklijke Natuurkundige Vereeniging, Batavia, Monografie 2, Kolff Publishers, p. 1-162.
(online at: https://www.delpher.nl/nl/boeken/view?coll=boeken&identifier=MMKB02:100003937:00013)
('The geology and geomorphology of the Idjen'. Monograph on the Ijen highlands and Ijen volcano and caldera complex, easternmost Java. Year of publication not mentioned in the book, but usually assumed to be 1921. (although Kemmerling's foreword is from 1917))

Kemmerling, G.L.L. (1921)- De uitbarsting van den G. Keloet in den nacht van den 19den op den 20sten Mei 1919. Vulkanologische Mededeelingen (Dienst van het Mijnwezen, Batavia) 2, p. 1-120.
(online at: https://www.delpher.nl/nl/boeken/view?identifier=MMKB24:064356000:00002)
('The eruption of the Kelud in the night of 19-20 May 1919'. Extensive report of catastrophic eruption and its results. Kemmerling managed to reach Kelut crater 4 days after eruption, and found the crater lake had disappeared, but crater walls remained intact)

Kemmerling, G.L.L. (1921)- De hernieuwde werking van den vulkaan G. Merapi (Midden Java) van begin Augustus 1920 tot en met einde Februari 1921. Vulkanologische Mededeelingen (Dienst Mijnwezen Nederlandsch Oost Indie) 3, p. 1-30.
('The renewed activity of the volcano G.Merapi (C Java) from early August 1920 through end February 1921')

Kemmerling, G.L.L. (1921)- Vulkanologische Berichten I-XII. Natuurkundig Tijdschrift voor Nederlandsch-Indie 81, p. 33-66.
('Volcanological Reports 1-12'. Series of short reports on 1920-1921 activities of Indonesia's most active volcanoes. I. Goentoer, II. Papandajan, III. Telagabodas, IV. Galoenggoeng, VI. Sorok Merapi, VII. Peuet Sagoee (Aceh), VIII. Merapi, IX. Keloet, Raoeng, XI. Kawah Idjen, XII. Batoer (Bali))

Kemmerling, G.L.L. (1922)- Vulkanologische Berichten XIII-XIV. Natuurkundig Tijdschrift voor Nederlandsch-Indie 82, p. 90-102.
('Volcanological Reports 13-14'. Short reports on 1921-1922 activities of Indonesia's active volcanoes. XIII. Awoe (Sangi), XIV. Keloet)

Kemmerling, G.L.L. & N. Taverne (1922)- Vulkanologische Berichten XV-XX. Natuurkundig Tijdschrift voor Nederlandsch-Indie 82, p. 188-207.
(online at: https://resolver.kb.nl/resolve?urn=MMTEY01:179526002:pdf)
('Volcanological Reports 15-20'. Short reports on 1922 activities of Indonesia's active volcanoes. XV. Merapi, XVI. Merbaboe, XVII. Sendoro, XVIII. Misc., XX. Seroea (Banda Sea) (For continuation of this series, see Taverne, 1923-1925))

Kemmerling, G.L.L. (1922)- De G. Semeroe, De G. Brama en de G. Lamongan in het begin van 1920. Vulkanologische Mededeelingen (Dienst Mijnbouw Nederlandsch-Indie), 4, p. 1-40.
(online at: https://drb-qa.nypl.org/read/6646625)
('Activities of the Semeru (Mahameroe), Brama (Bromo) and Lamongan volcanoes in early 1920'. East Java)

Kemmerling, G.L.L. (1924)- De drooglegging van het kratermeer van Goenoeng Keloet. De Ingenieur 39, 8, p. 127-133.
('The drainage of the crater lake of Gunung Kelud'. Detailed report at request of B.G. Escher on plans for drainage of Kelud crater lake, incl. problems with tunneling, the April 1924 fatal accident, etc. Engineering work initially designed and supervised by H.G. von Steiger, later continued by Ir. H. Tromp, N. Taverne and others. See also response by Taverne (1924))

Kemmerling, G.L.L. (1931)- Beschouwingen over de hernieuwde werking van den Merapi der Vorstenlanden van December 1930. Tijdschrift Koninklijk Nederlands Aardrijkskundig Genootschap (2), 48, p. 712-743.
('Discussion of the renewed activity of the Merapi in Central Java of December 1930'. Kemmerling disagrees with some of the Merapi 1930 narrative of Neumann van Padang (1931, De Mijningenieur). With Naschrift (post-script) on p. 934-935, criticizing some of the locations of the volcano observation posts, and recommends permanent removal of population from W and S flanks of Merapi)

Kirchenbaur, M., S. Schuth, A.R. Barth, A. Luguet, S. Konig, A. Idrus, D. Garbe-Schonberg & C. Munker (2022)- Sub-arc mantle enrichment in the Sunda rear-arc inferred from HFSE systematics in high-K lavas from Java. Contributions to Mineralogy and Petrology 177, 8, p. 1-25.
(online at: https://link.springer.com/content/pdf/10.1007/s00410-021-01871-9.pdf)
(Geochemistry of extended HFSE group (Nb-Ta-Zr-Hf-W-Mo) of K-rich rear-arc volcanoes Muria and Ringgit, compared to lavas of main Sunda arc volcanoes (Krakatoa, Galunggung, Merapi, Agung, Rinjani). Clear contribution of sediment to frontal arc lavas; K-rich rear-arc lavas tap more hybrid and enriched mantle sources. Sub-arc slab melting potentially triggered along slab tear beneath Sunda arc (result of forced subduction of oceanic basement relief at ~ 8 Ma). Age of slab tear coincides with paucity in arc volcanism, thrusting of Javanese basement crust and short-lived K-rich rear-arc volcanism)

Kohno, Y., L.D. Setijadji, P. Zoltan, H. Agung, P. Utami, A. Imai & K. Watanabe (2006)- Geochronology and petrogenetic aspects of Quaternary across arc magmatism on Merapi-Merbabu-Telomoyo-Ungaran volcanoes, Central Java, Indonesia. Proc. 3rd Symposium Earth resources and geological engineering education, Yogyakarta 2006, p. 194-201.
(online at: http://geothermal.ft.ugm.ac.id/wp-content/uploads/2012/12/Geochronology-and-Petrogenetic-Aspects-2006-Lucas-et-al.pdf)
(Paper documenting progressive S-ward younging of volcanic activity along Ungaran- Telomoyo- Merbabu-Merapi line of Quaternary volcanoes. Merapi in S currently active, with oldest flows dated as ~0.67 Ma. Ungaran in back-arc in N with Pleistocene K-Ar ages (0.22- 0.52 Ma and older ages (1.4± 0.5 Ma) from hornblende phenocrysts). Merapi lavas evolve from medium-K to high-K affinity during lifetime of magmatism)

Komorowski, J.C., S. Jenkins, P.J. Baxter, A. Picquout, F. Lavigne, S. Charbonnier, R. Gertisser et al. (2013)- Paroxysmal dome explosion during the Merapi 2010 eruption: Processes and facies relationships of associated high-energy pyroclastic density currents. J. Volcanology Geothermal Research 261, p. 260-294. *(online at: https://www.academia.edu/23458188/Paroxysmal_dome_explosion_during_the_Merapi_2010_eruption_Processes_and_facies_relationships_of_associated_high_energy_pyroclastic_density_currents)*
(S-directed explosions and retrogressive collapses on 5 November 2010 at Merapi destroyed rapidly-growing dome and generated high-energy pyroclastic density currents spreading over 22 km^2 with runout of 8.4 km, while contemporaneous co-genetic valley-confined PDCs reached 15.5 km)

Koning, J. (1919)- De Kloet ramp van 20 Mei 1919. N.V. Soerabaiasch Handelsblad, p. p. 1-228.
(online at: https://resolver.kb.nl/resolve?urn=MMKB24:068541000:pdf)
('The Kelud disaster of 20 May 1919'. Collection of eyewitness reports on 1919 Kelud disaster in E Java, which killed 5110 people by lahar in area around Blitar by journalists of Surabaya newspaper and other contributors, incl. G. Kemmerling and W. van Bemmelen Sr)

Koulakov, I., G. Maksotova, K. Jaxybulatov, E. Kasatkina, N.M. Shapiro, B.G. Luehr, S. El Khrepy & N. Al-Arifi (2016)- Structure of magma reservoirs beneath Merapi and surrounding volcanic centers of Central Java

modeled from ambient noise tomography. Geochem. Geophysics Geosystems 17, 10, p. 4195-4211. *(online at: http://gfzpublic.gfz-potsdam.de/pubman/item/escidoc:1975923:7/component/escidoc:1978904/1975923.pdf) (3D S-wave velocity model of upper crust down to 20 km under C Java from seismic ambient noise from >100 seismic stations. Large low-velocity anomaly under S flank of Merapi, with two layers: (1) upper ~1 km cover of volcanoclastic deposits and (2) anomaly at ~4–8 km (possible magma reservoir). Under Merapi summit, low-velocity anomaly at ~8 km, possibly active magma reservoir that feeds eruptive activity of Merapi)*

Kupper, H. (1984)- Die Stellung des Vulkans Krakatao im Malayischen Archipel, Indonesien. Mitteilungen Osterreichischen Mineralogischen Gesellschaft 129, p. 65-68.
(online at: https://opac.geologie.ac.at/ais312/dokumente/Mitt_OEMinGes_129_065_068.pdf)
('The position of the Krakatau volcano in the Malay Archipelago'. Brief review at '100 year Krakatau' symposium)

Kurniawan, I.A., T. Hasenaka & E. Suparka (2011)- Quartenary Gede Salak volcanic complex, Banten area, at the junction between Sumatra arc and Java arc, Indonesia. Proc. ISEGA Conf.?, p. 1-14.
(online at: https://www.researchgate.net/publication/258467739_Quartenary_Gede_Salak_volcanic_complex_Banten_area_at_the_junction_between_Sumatra_arc_and_Java_arc_Indonesia)
(Pleistocene Gede Salak volcanic complex in W Java consists of Gede, Salak, Batur and Wadas volcanoes. Mainly pyroclastic flow deposits in W and lava flows in E part. M edum- high-K basaltic to trachytic rocks, REE pattern similar to back-arc volcanoes)

Lapian, A.B. (1985)- Volcanoes and the history of Indonesia (with special reference to the big eruption of Krakatau in 1883. In: D. Sastrapradja et al. (eds.) Proc. Symposium on 100 years development of Krakatau and its surroundings, Jakarta 1983, Indonesian Inst. of Sciences (LIPI), p.

Latengke, V.C., I. Faiqi, P.A.S.M. Dewi & E.N. Nainggolan (2019)- Characteristics of Muria vulkanism and tectonic impact at development of nuclear reactor in Muria, Central Java. Proc. EAGE-GSM 2nd Asia Pacific Meeting on Near Surface Geoscience and Engineering, Kuala Lumpur 2019, p. 1-5.
(Muria volcano at C Java north coast near proposed site of nuclear rector. Young Muria vulcanism was produced in 320 ka, but no recorded historic volcanic activity. Magmas ultrapotassic series in middle-base lava series and calc-alkaline potassic and shoshonitic series from cooling magma with contact with ground water producing phreatic eruptions)

Lavigne, F. (1998)- Les lahars du volcan Merapi, Java central, Indonesie: declenchement, budget sedimentaire, dynamique et zonage des risques associes. Ph.D. Thesis Universite Blaise Pascal, Clermont-Ferrand, p. 1-539.
('The lahars of Merapi Volcano, Central Java, Indonesia: triggering, sediment budget, dynamics and zoning of associated risks')

Lavigne, F. (2004)- Rate of sediment yield following small-scale volcanic eruptions: a quantitative assessment at the Merapi and Semeru stratovolcanoes, Java, Indonesia. Earth Surface Processes and Landforms 29, 8, p. 1045-1058.

Lavigne, F., R. Hadisantono, M. Sumaryadi, F. Flohic & F. Geyer (2003)- L'eruption du volcan Papandayan (Indonesie) en novembre 2002: aleas directs et induits. Bull. Association Geographes français 81, 1, p. 84-94.
(online at: https://www.persee.fr/docAsPDF/bagf_0004-5322_2004_num_81_1_2368.pdf)
('The eruption of the Papandayan volcano in November 2002: direct and induced hazards'. Eruption expelled more than one million m^3 of volcanic ash. Entire drainage basin was disrupted through several geomorphic processes)

Lavigne, F. & H. Suwa (2002)- Contrasts between debris flows, hyperconcentrated flows and stream flows at a channel of Mount Semeru, East Java, Indonesia. Geomorphology 61, 1-2, p. 41-58.
(Study of debris flows, hyperconcentrated flows, and stream flows in Curah Lengkong river on SE slope of Mount Semeru in East Java)

Lavigne, F. & J.C. Thouret (2002)- Sediment transportation and deposition by rain-triggered lahars at Merapi Volcano, Central Java, Indonesia. Geomorphology 49, p. 45-69.
(online at: https://www.researchgate.net/publication/223696787_Sediment_Transportation_and_Deposition_by_Rain-Triggered_Lahars_at_Merapi_Volcano_Central_Java_Indonesia)
(Merapi volcano in C Java prone to lahar generation, due to: (1) millions of m^3 of pyroclastic deposits from frequent pyroclastic flows at 2- 4-year intervals; (2) high rainfall intensity during the November-April rainy season; and (3) dense drainage pattern)

Lavigne, F., J.C. Thouret, D.S. Hadmoko & C.B. Sukatja (2007)- Lahars in Java: initiations, dynamics, hazard assessment and deposition process. Forum Geografi 21, 1, p. 17-32.
(online at: http://journals.ums.ac.id/index.php/fg/article/view/1822/1274)
(Lahar term for rapidly flowing, high-concentration, poorly sorted sediment-laden mixtures of rock debris and water from a volcano. Resulting deposits poorly sorted, massive, made up of clasts (mainly volcanics) in mud-poor matrix. Lahars may be direct result of eruptive activity or not temporally related to eruptions. Etc.)

Lavigne, F., J.C. Thouret, B. Voight, H. Suwa & A. Sumaryono (2000)- Lahars at Merapi volcano, Central Java: an overview. J. Volcanology Geothermal Research 100, p. 423-456. *(online at: www.researchgate.net/publication/223908999_Lahars_at_Merapi_Volcano_Central_Java_An_Overview*
(Merapi volcano in C Java, is one of most active volcanoes in world. At least 23 of 61 reported eruptions since mid-1500s produced lahar deposits. Combined lahar deposits ~286 km^2 on flanks and surrounding areas. Lahars commonly triggered by rainfalls of ~40mm in 2 hrs. Average velocities 5-7 m/s at 1000m)

Legowo, B., S. Putra, M.K.I. Mufti, H. Purwanto, H. Rifai, W. Suryanto & B. Purnama (2023)- Identification pyroclastic flow of magnetic minerals (Holocene volcano): a case study of paleo-volcano Lawu on the South side, Central Java, Indonesia. Kuwait J. Science 50, 4, p. 724-730.
(manuscript online at: https://www.sciencedirect.com/science/article/pii/S2307410823001232)
(Inactive 'Old Lawu' volcano in C Java (~10,000 years old. Lawu volcano erupted on November 28, 1885. Discusses of magnetic susceptibiliyy and minerals in pyroclastic flows from Mt Lawu))

Le Guern, F., H. Tazieff & R. Faivre Pierret (1982)- An example of health hazard: people killed by gas during a phreatic eruption: Dieng Plateau, Java, Indonesia: Bulletin of Volcanology 45, p. 153-156.
(142 inhabitants of Dieng Plateau in C Java were asphyxiated on February 20, 1979, by poisonous magmatic CO_2 gas, during a mild phreatic eruption)

Lestiani, D.D., R.Apryani, L. Lestari, M. Santoso, E.P. Hadisantoso & S. Kurniawati (2018)- Characteristics of trace elements in volcanic ash of Kelud eruption in East Java, Indonesia. Indonesian J. of Chemistry (UGM) 18, 3, p. 457-463.
(online at: https://jurnal.ugm.ac.id/ijc/article/view/26876/20850)
(Chemistry of ash from Mt Kelud eruption of February 13, 2014. Ejected huge plume of ash and sand >26 km into air, which moved >500km west over Java. Composition medium-K basaltic andesite. Etc.)

Leterrier, J., Y.S. Yuwono, R. Soeria-Atmadja & R.C. Maury (1990)- Potassic volcanism in Central Java and South Sulawesi, Indonesia. J. Southeast Asian Earth Sciences 4, 3, p. 171-187.
(Neogene- Quaternary K-rich volcanics from back-arc of C Java and S Sulawesi 3 series: (1) silica-saturated or oversaturated potassic (SK); (2) weakly silica-saturated alkaline potassic (Muria 1, Genuk in Java; Baturape Fm, Cindako Fm, Camba 2a Fm and part of Lompobatang stratovolcano, S Sulawesi); and (3) silica-undersaturated ultrapotassic, usually leucite-bearing (Muria 2, Bawean in Java; Camba 2b Fm, Sopeng I Fm in Sulawesi). Rocks compatible with subduction-related environment, but in S Sulawesi emplacement post-dates latest known subduction. In C Java do not fit with model of increasing K2O with depth of Benioff plane, and location of UK series is independent from latter (Quaternary UK Series on Bawean away from 600 km isobath). Prefer genetic model for K-rich volcanic series by melting of mantle sources enriched in incompatible elements during previous subduction events, and possibly involving contribution of subcontinental mantle (C Java))

Li, W., F. Costa, K. Nagashima (2021)- Apatite crystals reveal melt volatile budgets and magma storage depths at Merapi Volcano, Indonesia. Journal of Petrology 62, 4, p. 1-35.
(online at: https://academic.oup.com/petrology/article/62/4/egaa100/5941471)

Lube, G., S.J. Cronin, J.C. Thouret & Surono (2011)- Kinematic characteristics of pyroclastic density currents at Merapi and controls on their avulsion from natural and engineered channels. Geological Society of America (GSA) Bull. 123, 5-6, p. 1127-1140.
(online at: https://www.researchgate.net/publication/236974572_Kinematic_characteristics_of_pyroclastic_density_currents_at_Merapi_and_controls_on_their_avulsion_from_natural_and_engineered_channels)
(On 14 June 2006 four dome collapses at Merapi volcano, C Java, led to generation of four block-and-ash flows into Kali Gendol valley. All four pyroclastic density currents locally overflowed channel margins to devastate cultivated terraces along each side of the box-shaped canyon, while propagating 2.2 km within adjacent tributaries. Fow avulsion caused by overflow of up to 20 vol% of dense, basal part of pyroclastic density currents onto interfluves)

Maaskant, A. (1940)- Onderzoek van de plagioklasen uit de Krakatau-asch van 1883. Geologie en Mijnbouw, n.s., 2, 8, p. 160-167.
(online at: https://drive.google.com/file/d/130IjYQyZNXfIr0vcVFUzMS95psrIH6bW/view)
('Investigation of plagioclase from the Krakatau ash of 1883'. Krakatau 1883 ash 91% glass and 9% crystals. Two groups of (zoned) plagioclase crystals, one with core average An of 45%, one with average 75%)

Madden-Nadeau, A.L., M. Cassidy, D.M. Pyle, T.A. Mather, S.F.L. Watt, S.L. Engwell, M. Abdurrachman, M.E.M. Nurshal, D.R. Tappin & T. Ismail (2021)- The magmatic and eruptive evolution of the 1883 caldera-forming eruption of Krakatau: Integrating field- to crystal-scale observations. J. Volcanology Geothermal Research 411, 107176, p. 1-21.
(Manuscript online at: https://nora.nerc.ac.uk/id/eprint/529635/1/Krakatau1883_Paper_Final_LF.pdf)
(Sequence of events since May 1883 before caldera-forming paroxysmal explosion of Krakatau volcano on 27 August 1883)

Maeno, F. & F. Imamura (2011)- Tsunami generation by a rapid entrance of pyroclastic flow into the sea during the 1883 Krakatau eruption, Indonesia. J. of Geophysical Research: Solid Earth 116, B9, B09205, p. 1-24.
(online at: http://onlinelibrary.wiley.com/doi/10.1029/2011JB008253/epdf)
(Pyroclastic flow with volume of >5 km^3 rapidly entering sea at 10 million m3/second(?) most plausible mechanism of 1883 Krakatau tsunami)

Maeno, F., S. Nakada, M. Yoshimoto, T. Shimano, N. Hokanishi, A. Zaennudin & M. Iguchi (2019)- A sequence of a plinian eruption preceded by dome destruction at Kelud volcano, Indonesia, on February 13, 2014, revealed from tephra fallout and pyroclastic density current deposits. J. Volcanology Geothermal Research 382, p. 24-41.
(online at: https://www.sciencedirect.com/science/article/pii/S0377027317301385)
(Reconstruction of 2014 Kelud eruption sequence. Plinian phase preceded by destruction of earlier lava dome)

Maeno, F., S. Nakada, M. Yoshimoto, T. Shimano, N. Hokanishi, A. Zaennudin & M. Iguchi (2019)- Eruption pattern and a long-term magma discharge rate over the past 100 years at Kelud Volcano, Indonesia. J. of Disaster Research (Tokyo) 14, 1, p. 27-39.
(online at: https://www.jstage.jst.go.jp/article/jdr/14/1/14_27/_pdf/-char/en)
(Kelud Volcano among most active volcanoes in Indonesia. Volumes of 1901, 1919, 1951, 1966, 1990, and 2014 eruptions estimated between 51-296 × 10^6 m3. Long-term mass discharge rate was estimated as ~1.5 × 10^{10} kg/year, relatively high compared to other basaltic-andesitic subduction-zone volcanoes)

Mandeville, C.W., S.H.S. Carey & J. King (1994)- Paleomagnetic evidence for high temperature emplacement of the 1883 subaqueous pyroclastic flows from Krakatau volcano, Indonesia. J. of Geophysical Research 99, B5, p. 9487-9504.

(1883 eruption of Krakatau volcano in Indonesia discharged >6.5 km^3 (dense rock equivalent) of pyroclastic material into Sunda Straits within 15km of volcano. Paleomagnetic evidence for high-emplacement T from pumice clasts from core of submarine pyroclastic deposits, showing mean inclination of ~24°, indicating cooling of clasts from >350°C after deposition)

Mandeville, C.W., S. Carey & H. Sigurdsson (1996)- Magma mixing, fractional crystallization and volatile degassing during the 1883 eruption of Krakatau volcano, Indonesia. J. Volcanology Geothermal Research 74, p. 243-274.
(Krakatau eruption of 1883 produced ~12.5 km3 of magma, 90% rhyodacite, 4% mafic dacite, 1% andesite and ~5% lithic material. Magma chamber compositionally and thermally zoned with upper part rhyodacite at T of 880-890 °C, overlying more mafic dacite at 890-913°C, and andesite at 980-1000°C)

Mandeville, C.W., S. Carey & H. Sigurdsson (1996)- Sedimentology of the Krakatau 1883 submarine pyroclastic deposits. Bulletin of Volcanology 57, 7, p. 512-529.
(Majority of tephra generated during 1883 eruption of Krakatau deposited in sea within 15 km of caldera. Thickest accumulation of tephra from eruption on submarine slopes W of Sertung (80m). Two submarine pyroclastic facies (1) massive, poorly sorted pumice and lithic lapilli-to-block sized fragments in silty-sandy ash matrix (indistinguishable from 1883 subaerial pyroclastic flow deposits; result of sinking of components of pyroclastic flows over water), (2) less common well-sorted, planar-laminated to low-angle cross-bedded, vitric-enriched silty ash, likely deposited from low-concentration pyroclastic density currents generated by shear between submarine flows and seawater)

Mandeville, C.W., A. Sasaki, G. Saito, K. Faure, R. King & E. Hauri (1998)- Open-system degassing of sulfur from Krakatau 1883 magma. Earth Planetary Science Letters, 160, 3-4, p. 709-722.
(Sulfur and oxygen isotopic data for tephra from August 1883 eruption of Krakatau. Sulfur isotopic ratios in unaltered tephra enriched in 34S relative to mantle sulfur. High values best be explained by open-system or multi-stage degassing of SO2 from oxidized rhyodacitic and gray dacitic magmas)

Marin, J., Y.M. Muhammad & T Winarno (2022)- Characteristics of volcanic rocks and associated intrusions based on petrography analysis in Jari-Krondonan Area, Bojonegoro Regency, East Java. Proc. 1st Int. Seminar on Earth Sciences and Technology (ISEST 2021), Bandung, IOP Conference Series: Earth and Environmental Science 1047, 012034, p. 1-10.
(online at: https://iopscience.iop.org/article/10.1088/1755-1315/1047/1/012034/pdf)
(Pandan volcano one of dormant Quaternary volcanoes in E Java. Four andesitic intrusion centers which extend in N direction. Gabbro and metamorphic xenoliths Mount Lawang and Mount Watu, indicating interaction with country rock during rise of magma)

Marin, J., T. Winarno & D. Mindasar (2019)- Mineralogy and geochemistry variation of igneous rocks from Ungaran and Muria Volcano and Its processes related to subduction zone magmatism of Sunda Arc. Proc. Int. Conf. on Geoscience, Makassar 2018, IOP Conference Series: Earth and Environmental Science, 279, 012017, p. 1-9.
(online at: https://iopscience.iop.org/article/10.1088/1755-1315/279/1/012017/pdf)
(Igneous rocks from Ungaran and Muria volcanoes represent two different types of subduction magmatism: Ungaran typical volcanic arc basaltic andesite-andesite, Muria undersaturated, high-K calc alkaline-alkaline magma (confirming what has already been known for 50-100 years?; JTvG)

Marini, J.C. (2004)- L'Hafnium dans les zones de subduction: bilan isotopique des flux entrant et sortant. Doct. Sci. Thesis, Universite Joseph Fourier, Grenoble, p. 1-135.
(online at: www.iaea.org/inis/collection/NCLCollectionStore/_Public/37/095/37095281.pdf)
('Hafnium in subduction zones: isotopic record of incoming and outgoing flows'. Includes chapters on Hafnium isotopes in N Luzon and Late Eocene- Pleistocene volcanic arc lavas from Java, which appear very radiogenic, possibly caused by contamination of oceanic pelagic sediments in magma sources)

Maury, R.C., R. Soeria-Atmadja, R. Bellon, J.L. Joron, Y.S. Yuwono & E. Suparka (1987)- Nouvelles donnees geologiques et chronologiques sur le deux associations magmatiques du volcan Muria (Java, Indonesie). Comptes Rendus Academie Sciences, Paris, 304 (II), 4, p. 175-180.
('New geological and chronological data on the two magmatic associations of Muria volcano'. Two lava types in Pleistocene Muria volcano: young (0.6- 0.4 Ma) ultrapotassic leucite-bearing lavas and underlying leucite-free rocks, less rich in K (1.1- 0.6 Ma))

Minakami, T., T. Miyazaki & I. Surjo (1969)- Volcanological survey of Indonesian volcanoes- Part 1: Topographical change in the area near the summit crater of Mt. Merapii and and its geothermal survey. Bull. Earthquake Research Institute (University of Tokyo) 47, 5, p. 951-967.
(online at: https://repository.dl.itc.u-tokyo.ac.jp/records/33354)javascript:OnLinkClick('/record/33354/files/ji0475007.pdf', 33354, 'open_date')
(Brief review of historical changes in Merapi volcano crater area and new volcano observation in 1968. After Minakami's observations in 1941, seven new lava flows formed in 1948, 1953, 1954, 1956, 1957, 1961 and 1967. New temperature measurements mainly correspond to altitude of locations)

Mitsuoka, T., A. Toramaru, A. Harijoko & H.E. Wibowo, (2021)- Eruption types and conduit dynamics of Kukusan and Genteng volcanoes of the Ijen Volcanic Complex, Indonesia. Memoirs Faculty of Science, Kyushu University, D, Earth and Planetary Sciences 35, 1, p. 1-17.
(online at: https://api.lib.kyushu-u.ac.jp/opac_download_md/4371995/3501_p001.pdf)
(Eruption types of two monogenetic mafic volcanoes in Ijen volcanic complex: Kukusan volcano considered as sub-Plinian; Genteng is Strombolian. Kukusan scoria higher bubble number density and microlite crystallinity than Genteng, suggesting rapid magma ascent in volcanic conduit and higher magma viscosity, leading to a more explosive sub-Plinian eruption)

Moktikanana, M.L.A. & A. Harijoko (2022)- Reconnaissance study on the stratigraphy and characteristics of eruption products associated with basaltic caldera in Raung volcano, East Java, Indonesia. Proc. 13th AUN/SEED-Net Regional Conference Geological and Geo-Resource Engineering (RCGeoE 2021; online), IOP Conference Series: Earth and Environmental Science 1071, 012016, p. 1-11.
(online at: https://iopscience.iop.org/article/10.1088/1755-1315/1071/1/012016/pdf)
(Raung volcano in E Java pre-historic devastating eruption evidenced by caldera at summit. Four pyroclastic fall deposits, two lava flows, ignimbrite, block and ash flow deposit, and lahar identified. Plinian eruption represented by layers of pumice fall, uncommon for an andesitic-basaltic stratovolcano)

Moktikanana, M.L.A., T. Ohba, A. Harijoko, H.E. Wibowo, M.A. Gurusinga & S.M. Cahyani (2024)- Geology, chronology, and temporal evolution of basaltic to dacitic magma system in Raung volcano, East Java, Indonesia. J. Volcanology Geothermal Research 452, 108126, p. 1-21.
(online at: https://www.sciencedirect.com/science/article/pii/S0377027324001185)
(Raung volcano in East Java (3332 m above s.l.) with magma composition from basalt to dacite. Frequently active from 1580-now. Radiocarbon dating of charcoal beneath tephra fall layers yield ages of major Plinian VEI-4 to VEI-5 eruptions were around 1200 CE and 1600 CE. Current volcanic activity mainly andesitic Strombolian eruption. Etc.)

Moktikanana, M.L.A., H.E. Wibowo, E. Rahayu & A. Harijoko (2021)- Hummock size and alignment in Gadung debris avalanche deposit, Raung Volcanic Complex, East Java, Indonesia. IOP Conference Series: Earth and Environmental Science 851, 012037, p. 1-16.
(online at: https://iopscience.iop.org/article/10.1088/1755-1315/851/1/012037/pdf)
(Debris avalanche deposit Gunung Gadung in Raung Volcanic Complex formed by failure of volcanic edifice. Collapse followed two main flow directions with different kinds of debris avalanche, i.e., freely spreading and valley filling. No significant correlation between hummock size and distance from source)

Muhammad, A.E.P., M. Abdurrachman, N. Kartadinata & W.F. Banggur (2025)- Petrogenesis of Sadakeling-Karaha Volcanic Complex, Tasikmalaya, West Java, Indonesia: Argoland contamination. Proc. 1st Int.

Conference of Petroleum Mining Geology Geoscience Energy & Environmental Technology (ICPMGET), Jakarta 2024, IOP Conference Series: Earth and Environmental Science 1451, 012021, p. 1-9.
(online at: https://iopscience.iop.org/article/10.1088/1755-1315/1451/1/012021)
(Sadakeling-Karaha Volcanic Complex N of Galunggung in W Java categorized as Volcanic Arc Basalt. Strong influence of continental crust suggests part of active continental margin, with contamination from Sundaland crust in N and Gondwana in S. Trace element Sr and Nd suggest link with SE Australian Granite)

Muller, M., A. Hordt & F.M. Neubauer (2002)- Internal structure of Mount Merapi, Indonesia, derived from long-offset transient electromagnetic data. J. of Geophysical Research 107, B9, p. 2187.
(Long-offset transient electromagnetic survey gave 2 resistivity profiles (10 km E-W and 15 km S-N) of Merapi volcano, C Java. Extensive conductive layer at depths of 1-2 km, probably caused by fluids)

Mulyadi, E. (1992)- Le complexe de Bromo-Tengger (Est Java, Indonesie): etude structurale et volcanologique. Doct. Thesis Universite Blaise Pascal, Clermont Ferrand, France, p. 1-152. *(Unpublished)*
('The Bromo- Tengger complex (East Java): structural and volcanological study')

Mulyadi, E. (1993)- The sand-sea and other calderas formation in Bromo-Tengger complex, East Java. Proc. 22nd Annual Conv. Indonesian Association Geologists (IAGI), Bandung, 1, p. 35-44.
(online at: https://www.iagi.or.id/web/digital/61/7.pdf)
(In Bahasa Indonesia. Bromo-Tengger complex in E Java composite strato-volcano. Five eruption centers since ~1.4 Ma, each destroyed by caldera formation. Current Sand Sea caldera 9x10km wide and formed during two big eruption series that produced Tosari and Ngadas pyroclastic deposits (between ~2750- 8000 years ago?). Post-caldera volcanic cones Bromo, Batur, etc.)

Mulyaningsih, S. (2002)- Volcano-stratigraphy on the South Plain of Merapi, Yogyakarta: implication of volcanic activities to the civilization performance in the 8-16th centuries. Proc. 31st Annual Conv. Indonesian Association Geologists (IAGI), Surabaya, 2, p. 397-411.
(online at: https://www.iagi.or.id/web/digital/18/VOLCANO-STRATIGRAPHY-ON-THE-SOURTH-PLAIN-OF-MERAPI,-YOGYAKARTA;-IMPLICATION-OF-VOLCANIC-ACTIVITIES-TO-THE-CIVILIZATION-PERFORM Etc.)
(Four periods of major eruption disasters at S side of Merapi: 8th, 10th (1006, demise of 'Old Mataram'?), 13th and 16th (1587) centuries)

Mulyaningsih, S. & S. Bronto (2000)- Genesis of the ancient Borobudur Lake, Central Java, related to Merapi volcano activities. Proc. 29th Annual Conv. Indonesian Association Geologists (IAGI), Bandung, 4, p. 149-154.
(Borobudur temple 27 km W of Merapi volcano built in area surrounded by former lake, possibly formed by damming of Progo River by Merapi eruption deposits around 1710 BC. Lake deposits ~13m thick)

Mulyaningsih, S., S. Bronto, A. Kusniadi, L. Apriyanti, L. Budiyanto & D.A. Wiloso (2022)- The petrology and volcano-stratigraphy of the Muria-Peninsula high-K volcanic rocks, Central Java, Indonesia. J. Geoscience Engineering Environment Technology (JGEET) 7, 2, p. 69-80.
(online at: https://journal.uir.ac.id/index.php/JGEET/article/download/9602/4364/)
(Quaternary Muria volcano (1.2 Ma- 10ka) at N coast of Java with high-very high-K ('ultrapotassic') volcanics, with leucite-rich trachyte and pyroxene-rich basaltic-andesites. Volcanic complex includes Muria (in center, with 4 craters), Genuk (N) and Patiayam (S) eruption centers. High-K volcanics with 4-6% K2O, very high-K volcanics with 6-8.2% K2O. Calcareous sediments of Bulu Fm are basement of Muria trachyandesite. Pumice-rich volcanic breccia of Ujungwatu Fm are basement of basanite-tephrite of Genuk Volcano. Most of Muria volcanic materials low in leucite, while some maars contain pumice-rich pyroclastic flows and basaltic lava. Two periods of magmatic series developed in Muria-Peninsula)

Mulyaningsih, S. & S. Godang (2020)- Geochemistry of basaltic Merbabu volcanic rocks, Central Java, Indonesia. Indonesian J. on Geoscience (IJOG) 7, 2, p. 161-178.
(online at: https://ijog.geologi.esdm.go.id/index.php/IJOG/article/view/456/312)
(S flank of Merbabu Volcano with olivine basalt and augite-rich basalt flows)

Mulyaningsih, S., S. Hidayat, B.A. Rumanto & G. Saban (2016)- Identifikasi karakteristik erupsi gunung api Merbabu berdasarkan stratigrafi dan mineralogi batuan gunung api. Pros. Seminar Nasional Aplikasi Sains & Teknologi (SNAST 2016), Yogyakarta, p. 85-97.
(online at: http://journal.akprind.ac.id/index.php/snast/article/view/757/484)
('Identification of eruption characteristics of Merbabu volcano based on the stratigraphy and mineralogy of volcanic rocks')

Mumtaza, T.H., E. Handini, T. Hasenaka, Y. Mori & T.N. Khasanah (2024)- Petrology and geochemistry of Mount Lurus lavas: evidence for alkaline to subalkaline transition in the rear arc of Java, Sunda Arc. Proc. Int. Conf. Geological Engineering and Geosciences, Yogyakarta 2023, IOP Conference Series: Earth and Environmental Science 1373, p. 012035, p. 1-7.
(online at: https://iopscience.iop.org/article/10.1088/1755-1315/1373/1/012035/pdf)
(Mount Lurus small Quaternary volcanic center at N coast of eastermost Java near Ringgit-Beser. Erupted both alkaline and subalkaline calcalkaline, island arc lavas. Magmas sourced from at least three magma chambers of distinct composition: highly potassic (comparable to evolved-K series of Ringgit-Beser) and hydrous-potassic magma (Old Lurus edific) and calc-alkaline magma (Young Lurus edifice))

Nadeau, O. (2011)- The behaviour of base metals in arc-type magmatic-hydrothermal systems- insights from Merapi Volcano, Indonesia. Ph.D. Thesis McGill University, Montreal, p. 1-195. *(online at: https://central.bac-lac.gc.ca/.item?id=TC-QMM-104612&op=pdf&app=Library&oclc_number=794605927)*
(At Merapi, injection of sulfide melt-saturated mafic magma into shallower, more evolved and more oxidized resident magma induced exsolution of hydrothermal fluid from mafic magma. Viewed as possible model of formation of porphyry copper deposits below stratovolcanoes)

Nadeau, O., J. Stix & A.E. Williams-Jones (2013)- The behavior of Cu, Zn and Pb during magmatic-hydrothermal activity at Merapi volcano, Indonesia. Chemical Geology 342, p. 167-179.
(Fe, Cu, Co and Ni at Merapi volcano transferred from mafic melt to immiscible sulfide melt, then to magmatic volatile phase which carried them to surface)

Nadeau, O., J. Stix & A.E. Williams-Jones (2016)- Links between arc volcanoes and porphyry-epithermal ore deposits. Geology (GSA) 44, 1, p. 11-14.
(Formation of porphyry and epithermal ore deposits tied to volcanic cycles (partly based on observations of variations in vapors from Merapi volcano, C Java). Injections of mafic magma (commonly with explosive volcanic eruptions) are followed by decompression of magmatic hydrothermal system, inducing fluid phase separation, rapid cooling, and deposition of porphyry and epithermal ores at rel. shallow depths (<5km))

Nadeau, O., A.E. Williams-Jones & J. Stix (2013)- Magmatic-hydrothermal evolution and devolatilization beneath Merapi Volcano, Indonesia. J. Volcanology Geothermal Research 261, p. 50-68.

Nasution, A., M.N. Kartadinata, T. Kobayashi, D. Siregar, E. Sutaningsih, R. Hadisantono & E. Kadarstia (2004)- Geology, age dating and geochemistry of the Tangkuban Parahu geothermal area, West Java, Indonesia. J. Geothermal Research Soc. Japan 26, 3, p. 285-303.
(online at: https://www.jstage.jst.go.jp/article/grsj1979/26/3/26_3_285/_pdf)
(Three main episodes of volcanic activity in Mt. Sunda volcanic complex (Sunda, Burangrang and Tangkuban Parahu volcanoes): (1) Batunyusun Andesite (1.1 Ma), which unconformably overlies Neogene sediments; (2) Sunda Volcanics (0.56 and 0.18 Ma; Sunda Andesite and huge volume of pyroclastics covering area of 200 km^2 and with caldera-forming eruption between 0.205-0.18 Ma; (3) Tangkuban Parahu andesite and pyroclastics (62-22 ka). Younger craters at 9980-1440 yrs BP. No magmatic eruption since 1600)

Nawiyanto & N. Sasmita (2019)- The eruption of Mount Kelud in 1919: Its impact and mitigation efforts. Proc. 1st Int. Conf. Social Sciences and Interdisciplinary Studies (ICSSIS 2018), Advances in Social Science, Education and Humanities Research 208, p. 127-133.
(online at: https://www.atlantis-press.com/article/125906275.pdf)

(Review of 19-20 May 1919 disastrous eruption of Kelud volcano in E Java, with >5000 fatalities. During 20th century, Mt Kelud erupted in 1901, 1910, 1919, 1951 and 1990, of which 1919 eruption was among biggest)

Neumann van Padang, M. (1929)- De noordelijke doorbraak in de Papandajan kraterwand. De Mijningenieur 10 (1928), 3, p. 52-58.
('The northern breakthrough in the Papandayan crater wall'. West Java)

Neumann van Padang, M. (1929)- Goenoeng Papandajan. Proc. 4th Pacific Science Congress, Java 1929, Excursion Guide C1, 2, p.
(Excursion guide to Papandayan volcano near Garut, W Java, 1929)

Neumann van Padang, M. (1931)- Een en ander over de uitbarsting van den Merapi in 1930. De Mijningenieur 12, 2, p. 20-25.
('About the eruption of the Merapi in 1930')

Neumann van Padang, M. (1931)- Der Ausbruch des Merapi (Mittel Java) im Jahre 1930. Zeitschrift fur Vulkanologie 14, p. 135-148.
('The eruption of the Merapi (Central Java) in the year 1930'. Major simultaneous pyroclastic flow and block lahar of the 18/19 December 1930 catastrophe at Merapi was triggered by crater collapse. Entire area covered with 40 cm thick ash deposit, numerous casualties, Etc.)

Neumann van Padang, M. (1931)- De Merapi (Midden Java). De Tropische Natuur 20 (1931), 6, p. 99-103.
(online at: https://natuurtijdschriften.nl/pub/510840)
('The Merapi (Central Java)'. Historical review of Merapi volcano, which through much of its history did not have a crater at the top, but a dome-shaped lava mass. Eruptions since 1883 always same pattern: eruption of viscous lava, forming a lava dome, which plugs the eruption channel, and new magma needs to find alternative route. The catastrophic 18/19 December 1930 eruption involved collapse of part of mountain flank. Etc.))

Neumann van Padang, M. (1931)- Die Beziehungen zwischen Anfang und grosster Kraftentfaltung eines vulkanischen Ausbruches. Handelingen 6e Nederlands-Indisch Natuurwetenschappelijk Congres, Bandoeng September 1931, p. 670-679.
(The relations between the start and the greatest energy of a volcanic eruption')

Neumann van Padang, M. (1933)- Haben bei den Ausbrüchen des Slamet-Vulkans Eruptionsregen stattgefunden? Leidse Geologische Mededelingen 6, 1, p. 79-97.
(online at: https://repository.naturalis.nl/pub/505681)
('Did eruption rains take place during eruptions of the Slamet volcano?'. Discussion on possibility of rainfall triggered by volcanic eruptions (and feed lahars), as suspected during Gecember 1930 eruption of Merapi. Using rainfall data from 10 small eruptions with ash rains of Slamet volcano, Java, between 27 November 1926 and September 1932, the answer is: no evidence)

Neumann van Padang, M. (1933)- De uitbarsting van den Merapi (Midden Java) in de jaren 1930-1931. Vulkanologische en Seismologische Mededeelingen (Dienst van den Mijnbouw) 12, p. 1-116.
(online at: https://resolver.kb.nl/resolve?urn=MMKB24:076860000:pdf)
('The eruption of the Merapi (Central Java) in the years 1930-1931'. Including formation of a lava dome and a 2km long lava flow, followed by 'nuees ardentes'. Eruption of 18 December 1930 destroyed large part of the west slope of Merapi, killing 1369 people and destroying 13-23 villages by multiple nuees ardentes. With report on gases, thermal waters, etc. by M. Hartmann)

Neumann van Padang, M. (1933)- De Krakatau voorheen en thans. De Tropische Natuur 22, 8, p. 137-150.
(online at: https://natuurtijdschriften.nl/pub/511015/TN1933022008001.pdf)
('Krakatau, then and now'. Popular, but comprehensive and elegant review of development of Krakatau volcano, 50 years after 1883 eruption)

Neumann van Padang, M. (1936)- Die Tatigkeit des Merapi-Vulkans (Mittel Java) in den Jahren 1883-1888. Zeitschrift fur Vulkanologie 17, p. 93-113.
('The activity of the Merapi volcano (Central Java) in the years 1883-1888')

Neumann van Padang, M. (1936)- Over de verplaatsing van de kraters der vulkanen Slamet, Lamongan, Merapi en Semeroe. De Ingenieur in Nederlandsch-Indie (IV) 3, 1, p. IV.1- IV.6.
(online at: https://www.stichtingblauwelijn.nl/assets/files/1936-01.pdf)
('On the displacement of the craters of the volcanoes Slamet, Lamongan, Merapi and Semeru'. Several of Java active volcano groups show shift with age of active craters from N to S (Ungaran-Merbabu- Merapi) or NE to SW (Slamet, Lamongan), probably following fault zones)

Neumann van Padang, M. (1936)- Der Krater des Anak Krakatau. De Ingenieur in Nederlandsch-Indie (IV) 3, 6, p. 101-107.
(online at: https://www.stichtingblauwelijn.nl/assets/files/1936-06.pdf)
('The crater of the Anak Krakatau'. Discussion of evolution of Anak Krakata volcano from its first appearance on 29 December 1927 (after 44 years of Krakatau dormancy) until July 1935. Minor S-ward displacement of eruption center between 1927-1930. Anak Krakatau I was destroyed by wave erosion in January 1928. Anak Krakatau II lasted from January-July 1929, Anak Krakatau III from June 1930 until 9 August 1930, but soon re-emerged as Anak Krakatau IV in mid-August 1930 (and still exists today)

Neumann van Padang, M. (1936)- Het Dieng Gebergte. De Tropische Natuur, Jubileum Uitgave 25 years NINHV, p. 27-36.
(online at: https://natuurtijdschriften.nl/pub/511295)
('The Dieng Mountains', East Java. Dieng Mountains a volcano ruin, with 12 or more small, younger secondary volcanoes formed in area of 6 x 14 km). Junghuhn (1854) and Verbeek and Fennema (1896) considered it to be an old caldera, but theory disputed by Umbgrove (1929). Five andesite-basalt lava groups)

Neumann van Padang, M. (1937)- De uitbarsting van den Tjerimai in 1937 (verschijnselen van Juni t/m September). De Ingenieur in Nederlandsch-Indie (IV) 4, 12, p. IV.211- IV.227.
('The eruption of the Ciremai volcano in 1937 (June-September), W Java. See also Neumann vP (1938), below)

Neumann van Padang, M. (1938)- De erupties van den Tjerimai in 1937. De Tropische Natuur 27, 1, p. 1-10.
(online at: https://natuurtijdschriften.nl/pub/511388/TN1938027001001.pdf)
('The eruptions of the Ciremai volcano in 1937', W Java. Similar to paper above. First eruptions of Ciremai since 1805, started on 24 June 1937. First moderate eruption in East crater erupted only rel. cold mud and old rocks. An ash explosion followed during a 27 June visit by Dr. Neumann van Padang, but not causing any burning of vegetation. On 10 July until late September 1937, additional minor gas and ash eruptive acivities on flank of Ciremai and in crater)

Neumann van Padang, M. (1939)- Uber die vielen tausend Hugel im westlichen Vorlande des Raoeng-Vulkans (Ostjava). De Ingenieur in Nederlandsch-Indie (IV) 6, 4, p. IV.35- IV.41.
(online at: https://www.stichtingblauwelijn.nl/assets/files/1939-04.pdf)
('On the many thousand hills in the western foreland of the Raung Volcano (East Java)'. Numerous hills at W side of Raung volcano (E of Slamet) not small satellite volcanic centers, as suggested by Verbeek and as known from Lamongan volcano, but probably remnants of large ancient landslide (volcano flank collapse) (similar Neumann presentation in Dutch in Handelingen 8e Nederlandsc-Indisch Natuurwetenschappelijk Congres, Soerabaia 1938; without figures))

Neumann van Padang, M. (1939)- Die Gesteine des Slamet-Vulkans (Mittel Java). De Ingenieur in Nederlandsch-Indie (IV) 6, 11, p. IV.155- IV.161.
('The rocks of the Slamet volcano (Central Java'))

Neumann van Padang, M. (1955)- A Swedish sketch of the Island of Krakatau in 1748. Bulletin of Volcanology (Bulletin Volcanologique), Napoli, 17, p. 135-139.

(also Dutch version in TKNAG (1955) 72, p. 147-149))

Neumann van Padang, M. (1959)- Changes in the top of Mount Ruang (Indonesia). Geologie en Mijnbouw 21, 4, p. 113-118.
(online at: https://drive.google.com/file/d/0B7j8bPm9Cse0QTJrWms0Rmd6cFk/view)
(Activity and changes in shape of Mt Ruang in S part of Sangihe Archipelago since 1808)

Neumann van Padang, M. (1960)- The steam borings in Kawah Kamodjang. Bulletin of Volcanology (Bulletin Volcanologique), Napoli, 23, p. 251-255.
(On the successful drilling of the first five geothermal test wells on Java in 1926, by Dienst van den Mijnbouw at Kamojang/Guntur volcano complex, W Java (no subsequent geothermal exploration activity on Java until 1970s, with first production at Kamojang in 1983; JTvG))

Newhall, C.G., S. Bronto, B. Alloway, N.G. Banks, I. Bahar, M.A. Del Marmol, R.D. Hadisantono, R.T. Holcomb et al. (2000)- 10,000 years of explosive eruptions of Merapi volcano, Central Java: archaeological and modern implications. J. Volcanology Geothermal Research 100, p. 9-50.
(online at: www.academia.edu/5015196/10_000_Years_of_explosive_eruptions_of_Merapi_Volcano Etc.)
(Stratigraphy and radiocarbon dating of pyroclastic deposits at Merapi Volcano, C Java, reveals ~10,000 years of explosive eruptions:(1) Construction of Old Merapi stratovolcano to height of present cone or slightly higher. Oldest age for explosive eruption 9630 yrs BP; (2) Collapse(s) of Old Merapi with impoundment of Kali Progo to form early Lake Borobudur at ~3400 yrs BP. Somma-forming collapse at ~1900 yrs BP. Current cone began to grow soon thereafter. (3) Explosive Merapi eruptions before and after Buddhist and Hindu temples construction in C Java between 732 and ~900 AD; (4) Partial collapse of New Merapi in 12th-14th century AD); (5) Lava-dome extrusion and dome-collapse pyroclastic flows dominant in 20th century)

Newhall, C.G., R.W. Decker, A.S. Sumartadipura, R.I. Tilling & D.W. Peterson (1985)- A comparison of eruption and magma reservoirs of Krakatau, Mount St Helens and Galunggung. In: D. Sastrapradja et al. (eds.) Proc. Symposium on 100 years development of Krakatau and its surroundings, Jakarta 1983, Indonesian Institute of Sciences (LIPI), p. 11-19.

Nicholls, I.A. & D.J. Whitford (1983)- Potassium-rich volcanic rocks of the Muriah complex, Java, Indonesia: products of multiple magma sources? J. Volcanology Geothermal Research 18, p. 337-359.
(Extinct Pleistocene Muriah volcano in N-C Java two groups of lavas: (1) 'Anhydrous Series' leucite basanite to tephritic phonolite and (2)'Hydrous Series', tephrites and high-K andesites. Mafic A-series probably related to crustal doming-extension above dominant subduction regime. Hydrous Series magmas may be result of mixing between Anhydrous Series and high-K calc-alkaline basaltic- andesitic magmas related to subduction)

Niermeyer, J.F. (1900)- De vulkaan Idjen in Besoeki. Tijdschrift Koninklijk Nederlands Aardrijkskundig Genootschap (2), 17, p. 735-763.
(online at: https://babel.hathitrust.org/cgi/pt?id=mdp. 39015077870965;view=1up;seq=771)
('The Ijen volcano in Besoeki', easternmost Java. Early description of the then little known Kawah Ijen, one of the many craters and peaks of the Ijen Plateau)

Nihayatul, U., A. Supriyono & H. Rinardi (2017)- The eruption of Mount Kelud and its impacts in Blitar 1919-1922. Indonesian Historical Studies 1, 1, p. 67-77.
(online at: https://ejournal2.undip.ac.id/index.php/ihis/article/view/1164/954
(Historical account of Mt Kelud eruptions)

Nomanbhoy, N. & K. Satake (1995)- Generation mechanism of tsunamis from the 1883 Krakatau eruption. Geophysical Research Letters 22, 4, p. 509-512.
(Three models previously proposed for large tsunami generated by 1883 eruption of Krakatau: (1) large-scale caldera collapse of N part of Krakatau Island; (2) emplacement of pyroclastic flow deposits; (3) submarine explosion. Modeling suggests all three models displace same volume of water (11.5 km³), but in different ways. Submarine explosion model of 1-5 min duration best explains generation of largest tsunami)

Nossin, J.J., R.P.G.A. Voskuil & R.M.C. Dam (1996)- Geomorphologic development of the Sunda volcanic complex, West Java, Indonesia. International Institute Aerospace Survey and Earth Sciences (ITC) Journal, 1996, 2, p. 157-165.
(Sunda volcanic complex near Bandung characterized by one active volcano, Tangkuban Perahu, set in large caldera of former Sunda volcano. Another group of volcanoes to E (Bukittunggul-Manglayang complex) structurally related to Sunda complex. Sunda volcano blew up in probably two cataclysmic episodes (~105 ka and 50 ka) and collapsed to leave caldera in which Tangkuban Perahu volcano arose)

Nugroho, R.P., T. Disando, I.A. Kurniawan & M. Abdurrachman (2019)- Crystal size distribution (CSD) of plagioclase phenocryst-microphenocryst and the calculation of crystal resident times in the continuous central eruption sequences of Mount Lasem, Central Java, Indonesia. In: 1st Workshop on Environmental Science, Society, and Technology, Medan 2018, Journal of Physics: Conference Series; Bristol, 1363, 1, 012041, p. 1-7.
(online at: https://media.proquest.com/media/hms/PFT/1/uKlSK?_s=4gxWYELA%2BLhF3Ty4%2FvwzW6QF55g%3D)
(Two populations of plagioclase phenocryst size in five continuous andesite lava sequences at extinct Mt Lasem volcano in C Java, revealing variations in magma residence time during eruption (63-120 years and 8-18 years respectively))

Nurfiani, D., T. Ismail, A. Pratama, N.A. Rukmini, M. Abdurrachman, I.A. Kurniawan, W.A. Draniswari et al. (2024)- Geochemical characteristics of Anak Krakatau's (Indonesia) lava in the past half-century. Frontiers in Earth Science 12, 124500, p. 1-7.
(online at: https://www.frontiersin.org/journals/earth-science/articles/10.3389/feart.2024.1245001/full)
(After last caldera-forming eruption of Krakatau in 1883, activity of volcano resumed in 1927 with Surtseyan eruptions, forming Anak Krakatau. Since then, AK erupted every 1-3 years, culminating in 2018 VEI-3 eruption, which led to flank collapse. Since then, volcano continued episodic eruptions. All AK lavas mainly basaltic, but matrix-glass compositions more evolved, mostly dacitic-rhyolitic composition. On average, plagioclase phenocrysts and microphenocrysts were stored for approximately 142 years and 55 years, respectively)

Oba, N., K. Tomita & M. Yamamoto (1992)- An interpretation of the 1883 cataclysmic eruption of Krakatau from geochemical studies on the partial melting of granite. GeoJournal 28, 2, p. 99-108.
(Pumice from 1883 Krakatau eruption very different from other volcanics of Krakatau group, which are tholeiitic. Fragments of granitic rock in pumice flow are similar to W Malayan granites, and must have been captured by rising magma from underlying complex. Sialic crustal materials may have plunged into depths and partially melted to produce magma of granitic composition and mixed with ascending basaltic magma from upper mantle to produce pumice of dacitic composition)

Oba, N., K. Tomita, M. Yamamoto, S. Bronto, M. Istidjab, A. Sudradjat & T. Suhanda (1983)- Geochemical study of some volcanic products from Galunggung volcano, West Java. Reports Faculty of Science, Kagoshima University (Earth Science & Biology), 16, p. 1-20.
(online at: http://ir.kagoshima-u.ac.jp/bitstream/10232/5937/1/AN00040884_1983_001.pdf)
(Volcanic products of 1982 Galunggung eruptions range in chemical composition from basaltic andesite to basalt. Silica-content of first stage (5-8 April 1982) ~55 wt %, later stages ~50%)

Oba, N., K. Tomita, M. Yamamoto, M. Istidjab, M. Badruddin, M. Parlin, Sadjiman, A. Djuwandi, A. Sudradjat & T. Suhanda (1983)- Geochemical study of lava flows, ejecta and pyroclastic flows from the Krakatau group, Indonesia. Reports Faculty of Science, Kagoshima University 15, p. 21-41.
(online at: http://ir.kagoshima-u.ac.jp/bitstream/10232/5932/1/AN00040884_1982_002.pdf)
(Rocks and ejecta of Anak Krakatau almost same lithologic and geochemical characteristics of island arc basaltic andesites. New volcanic ash more basic in composition. Volcanics from Rakata three types: augite-hypersthene andesite, augite andesite and olivine basalt. Pyroclastic flow from 1883 eruption characterized by large amount of volcanic glass and high-contents of SiO_2, Na_2O and K_20 and low MgO, FeO and CaO (lithologically andesitic and geochemically dacitic). Granitic xenoliths of quartz monzonite in pyroclastic flow of Sertung)

Oba, N., K. Tomita, M. Yamamoto, M. Istidjab, A. Sudradjat, T. Suhanda, M., Parlin, Sadjiman, A. Djuwandi et al. (1983)- Geochemical study of volcanic products, in particular to pumice flow of the Krakatau group, Indonesia. Reports Faculty of Science, Kagoshima University 16, p. 21-41.
(online at: http://ir.kagoshima-u.ac.jp/bitstream/10232/5932/1/AN00040884_1983_002.pdf)
(1883 Krakatau pumice flow with lithic fragments of granitic rock (from underlying basement), metabasic igneous rock, tuff, and glassy andesite, presumably of cogenetic material. Pumice flow differs in mineral and chemical compositions from other volcanics of Krakatau Group. Possibly sialic crustal materials partially melted and mixed with or assimilated by ascending basaltic magma, producing dacitic magma)

Oba, N., K. Tomita, M. Yamamoto, M. Istidjab, A. Sudradjat & T. Suhanda (1986)- Geologic significance of granitic fragments found from pumice flow of 1883 eruption at the Krakatau Group, Indonesia. In: G.H. Teh & S. Paramananthan (eds.) Proc. 5th Regional Congress Geology Mineral Energy Resources of SE Asia (GEOSEA V), Kuala Lumpur 1984, 1, Bull. Geological Society Malaysia 19, p. 51-68.
(online at: https://gsm.org.my/products/702001-101276-PDF.pdf)
(Pumice flow of 1883 Krakatau eruption at Rakata Kecil and Sertung differs from other volcanics of Krakatau Group, which belong to Miyashiro's (1974) tholeiitic series. With lithic fragments of granitic rock (quartz monzonite- quartz monzodiorite; up to 30cm in size) similar in compositions to W Malay Peninsula granites. Granitic clasts presumably from underlying sialic crustal material at depth of Sunda Straits)

Paris, R., P. Wassmer, F. Lavigne, A. Belousov, M. Belousova, Y, Iskandarsyah, M. Benbakkar, B. Ontowirjo & N. Mazzoni (2014)- Coupling eruption and tsunami records: the Krakatau 1883 case study, Indonesia. Bulletin of Volcanology (Bulletin Volcanologique) 76, 814, p. 1-23.
(online at: http://repo.kscnet.ru/1329/1/Paris_2014.pdf)
Five kinds of sedimentary and volcanic facies related to Krakatau 1883 identified along coasts of Java and Sumatra: (1, 2) bioclastic and pumiceous tsunami sands, deposited before and during Plinian phase (26-27 August); (3) rounded pumice lapilli reworked by tsunami; (4) pumiceous ash fall deposits and (5) pyroclastic surge deposits (only in Sumatra))

Oemaiya, D.V. & D. Santoso (2019)- 3D model of Krakatau volcano subsurface structure based on gravity data. Proc. International Seminar on Science and Technology, Palu 2018, IOP Conference Series 1242, 012049, p. 1-10.
(online at: https://iopscience.iop.org/article/10.1088/1742-6596/1242/1/012049)
(Gravity study suggests position of magma chamber under Krakatau volcano not directly vertical or oblique under crater, and has multiple chambers trending NW-SE)

Pawellek, T. (2013)- Die grossen Caldera-Systeme Zentral-Indonesiens. Der Aufschluss 64, 4/5, p. 250-261.
(online at: www.researchgate.net/profile/Thomas-Pawellek/publication/271503688_DIE_GROSSEN_C Etc.)
('The large caldera systems of Central Indonesia'. Popular review of calderas of E Java (Tengger-Semeru, Ijen) and Bali (Batur))

Permana, B.R., Y. Darmadi & D. Sugandi (2022)- 4 Decades after the eruption, Galunggung pre-historical and historical records. Proc. 51st Annual Conv. Indonesian Association Geologists (IAGI), Makassar, p. 1-27.
(online at: https://www.iagi.or.id/web/digital/71/pitiagi-22-p-abs-007.pdf)
(Extensive review: Mount Galunggung is an active volcano in W Java that after long dormancy erupted in 1822, killing >4000 people. Tasikmalaya Fm debris field related to side eruption causing horseshoe shaped of crater and construction of Ten Thousand mountains at ~4,200 yts B.P. Another prolonged eruption in 1982-1983. Etc.)

Permanadewi, S., S. Maryanto & J. Subandrio (2017)- Mineralogi dan geokimia Tuf berumur Tersier dan Kuarter di daerah Cibadak, Sukabumi, Jawa Barat. Jurnal Geologi dan Sumberdaya Mineral (JGSM) 18, 4, p. 211-214.
(online at: http://jgsm.geologi.esdm.go.id/index.php/JGSM/article/view/295/299)

('Mineralogy and geochemistry of the Tertiary and Quarternary tuffs in the Cibadak area, Sukabumi, West Java'. Fine-grained pyroclastic rocks in Cibadak area, SW Java, two groups: Miocene tuffs of Jampang Fm and Quarternary tuffs)

Perttu, A., C. Caudron, J.D. Assink, D. Metz, D. Tailpied, B. Perttu, C. Hibert, D. Nurfiani et al. (2020)- Reconstruction of the 2018 tsunamigenic flank collapse and eruptive activity at Anak Krakatau based on eyewitness reports, seismo-acoustic and satellite observations. Earth Planetary Science Letters 541, 116268, p. 1-12.
(online at: www.sciencedirect.com/science/article/pii/S0012821X20302119?via%3Dihub)
(After months of eruptive activity, subaerial cone of Anak Krakatau collapsed on December 22, 2018, generating deadly tsunami with multiple waves around volcano, the last one being largest. Collapse led to change in eruptive style from continuous Strombolian explosions to sustained Surtseyan)

Peters, S.T.M., V.R. Troll, F.A. Weis, L. Dallai, J.P. Chadwick & B. Schulz (2017)- Amphibole megacrysts as a probe into the deep plumbing system of Merapi volcano, Central Java, Indonesia. Contributions to Mineralogy and Petrology 172, 16, p. 1-20.
(Metastable calcic amphibole megacrysts in basaltic andesites of Merapi volcano, C Java, crystallised at pressures of >500 MPa (mid- to lower crust))

Petroeschevsky, W.A. (1949)- Een eerste na-oorlogse verkenning van Lang Eiland en Anak Krakatau op 5 Juni 1949. Chronica Naturae 105, 10, p. 247-249.
('A first post-war reconnaissance of Pulau Panjang and Anak Krakatau on 5 June 1949'. Anak Krakatau in 1949 was little changed since 1941. Crater lake now close to sea level. Max. height ~132m)

Philibosian, B. & M. Simons (2006)- A survey of volcanic deformation on Java using ALOS PALSAR interferometric time series. Geochem. Geophysics Geosystems 12, 11, p. 1-20.
(online at: http://onlinelibrary.wiley.com/doi/10.1029/2011GC003775/epdf)
(Satellite-based survey of volcanic deformation on Java during 2007-2008. Volcanoes experiencing small eruptions are typically fed by magma bodies too small to produce recognizable InSAR signal. Deformation event at Lamongan volcano likely linked to magmatic intrusion at several km depth. Second one at Slamet volcano at shallower depth that may have been related to subsequent eruption)

Prabowo, A.. S. Permanadewi & H. Samodra (2021)- Analisis batuan gunungapi di daerah Banyuwangi dan sekitarnya, Provinsi Jawa Timur berdasarkan aspek geokimia. Jurnal Geologi dan Sumberdaya Mineral (JGSM) 22, 4, p. 197-207.
(online at: https://jgsm.geologi.esdm.go.id/index.php/JGSM/article/view/658
('Analysis of volcanic rocks in the Banyuwangi and surrounding areas, East Java Province based on geochemistry aspects'. Volcanic rocks (lava) in Banyuwangi area include Oligo-Miocene Batuampar and Merubetiri Fms towards the S coast, and Quaternary volcanics to N. Generally tholeitic basalts)

Prambada, O., Y. Arakawa, K. Ikehata, R. Furukawa, A. Takada, H.E. Wibowo, M. Nakagawa & M.N. Kartadinata (2016)- Eruptive history of Sundoro volcano, Central Java, Indonesia since 34 ka. Bulletin of Volcanology 78, 11, p. 1-19.
(online at: https://www.researchgate.net/publication/309436467_Eruptive_history_of_Sundoro_volcano_Central_Java_Indonesia_since_34_ka)
(Sundoro volcano 65 km NW of Yogyakarta, with 12 eruptive groups. Volcano very active since 34 ka)

Prasetya, Y.A., A.K. Gibran, M. Aziz & Siswandi (2024)- Petrology, geochemistry, and magma evolution of basaltic rocks of Baturraden area, Central Java, Indonesia. J. Geoscience Engineering Environment Technology (JGEET) 9, 4, p. 547-554.
(online at: https://journal.uir.ac.id/index.php/JGEET/article/view/17882)
(Basaltic rocks in Baturraden area in C Java are part of Slamet Lava 1 and Slamet Lava 2)

Prasetya, Y.A. & A. Toramaru (2023)- Petrology and geochemical comparation of pumice and scoria rocks of Slamet Volcano. ARPN J. Applied Sciences Management Engineering Technology (JASMET) 3, 1, p. 19-28.
(online at: http://ejurnal.itats.ac.id/jasmet/article/view/2954/2333)
(Slamet volcano in C Java second highest volcano on Java (3428m a.s.l.). Two types of pyroclastic rocks: (1) pumice in Old Slamet; (2) scoria in Young Slamet)

Prastistho, B. (1992)- Data baru umur Komplex Muria, Jawa. Proc. 21st Annual Conv. Indonesian Association Geologists (IAGI), Yogyakarta, 2, p. 507-516.
(online at: https://www.iagi.or.id/web/digital/50/21th-Vol-II-(7-10-Des-1992)-137-146.pdf)
('New data on ages of the Muria Complex, Java'. Oldest rock dated from Muria volcano ~1.01 Ma. Lava flows in N part of Muria complex 0.95 and 0.90 Ma. Volcanic neck of recent summit 0.17 Ma. Old Muria dominated by andesite- trachyte; Young Muria mainly basalt, with composition change at ~0.65 Ma)

Pratama, A., S. Bijaksana, M. Abdurrachman & N.A. Santoso (2018)- Rock magnetic, petrography, and geochemistry studies of lava at the Ijen Volcanic Complex (IVC), Banyuwangi, East Java, Indonesia. Geosciences (MDPI) 8, 183, p. 1-14.
(online at: https://www.mdpi.com/2076-3263/8/5/183/pdf)
(Rock magnetic studies of basaltic- andesitic lavas from Ijen Volcanic Complex, East Java)

Pratama, A., H. Hadiyat, F.R. Atarita, S. Bijaksana, D. Santoso, M. Abdurrachman & S.J. Fajar (2019)- Petrology and geochemistry dataset of lava from the Ijen Crater and Mount Blau, Banyuwangi, East Java, Indonesia. Data in Brief 27, 104765, p. 1-8.
(online at: www.sciencedirect.com/science/article/pii/S2352340919311205#!)

Pratama, A., D. Nurfiani, T. Ismail, G.N.R.B. Naen, M. Abdurrachman, W.F.S. Banggur et al. (2023)- Magma storage conditions beneath Krakatau, Indonesia: insight from geochemistry and rock magnetism studies. Frontiers in Earth Science 11, 1128798, p. 1-23.
(online at: https://www.frontiersin.org/articles/10.3389/feart.2023.1128798/full)
(Volcanostratigraphy and geochemistry of three eruptive periods of Krakatau: Old Krakatau, Young Krakatau, and Anak Krakatau. Old and Young Krakatau magma storage shallow (within upper 3 km; more differentiated magmas). Anak Krakatau magma storage deeper (up to 26 km), less differentiated, Etc.)

Pratama, A., D. Nurfiani, P.B. Suryanata, T. Ismail, G.N.R. Bunga Naen, M. Abdurrachman et al. (2023)- Magma storage conditions beneath Krakatau, Indonesia: insight from geochemistry and rock magnetism studies. Frontiers in Earth Science 11, 1128798, p. 1-23.
(online at: https://www.frontiersin.org/articles/10.3389/feart.2023.1128798/full)
(Old and Young Krakatau magma storage regions shallow (within upper 3 km), with more differentiated magmas. Anak Krakatau magma storage deeper (up to 26 km), less differentiated, and erupted hotter but more reduced compared to Old and Young Krakatau)

Pratama, Z. (2023)- Studi petrologi dan geokimia untik pemodelan magmatisme Kenozoicum Pulau Jawa. Thesis Institut Teknologi Bandung (ITB), p. *(Unpublished)*
(Java Island experienced three changes in magma affinity: (1) low-K around 40-18 Ma, (2) high-K around 12-2 Ma, and (3) medium-very high-K around 2 Ma- now)

Preece, K.J. (2014)- Transitions between effusive and explosive activity at Merapi volcano, Indonesia: a volcanological and petrological study of the 2006 and 2010 eruptions. Ph.D. Thesis University of East Anglia, U.K., p. 1-443.
(online at: https://ueaeprints.uea.ac.uk/id/eprint/49599/1/2014PreeceKPhd.pdf)
(2010 explosive eruption (VEI 4) of Merapi volcano was largest since 1872. In contrast, volcanism over last century has been characterised by dome-building and gravitational dome collapse. 2006 and 2010 eruptions produced basaltic andesite. Major zone of crystallisation between ~14- 29 km depth, although crystallisation occurs throughout crust. Eruptive style and transitions at Merapi linked to magma ascent rate, crystallisation and open- and closed-degassing processes, which can be influenced by magma influx)

Preece, K., R. Gertisser, J. Barclay, K. Berlo & R.A. Herd (2014)- Pre- and syn-eruptive degassing and crystallisation processes of the 2010 and 2006 eruptions of Merapi volcano, Indonesia. Contributions to Mineralogy and Petrology 168, 1061, p. 1-25.
(online at: https://link.springer.com/article/10.1007/s00410-014-1061-z)
(Geochemical data for melt inclusions and their clinopyroxene hosts extracted from dense dome lava, grey scoria and white pumice generated during peak of 2010 Merapi eruption, andcompared to 2006 eruption. Etc.)

Preece, K., R. Gertisser, J. Barclay, S.J. Charbonnier, J.C. Komorowski & R.A. Herd (2016)- Transitions between explosive and effusive phases during the cataclysmic 2010 eruption of Merapi volcano, Java, Indonesia. Bulletin of Volcanology 78, 54, p. 1-16.
(online at: https://www.researchgate.net/publication/305422788_Transitions_between_explosive_and_effusive_phases_during_the_cataclysmic_2010_eruption_of_Merapi_volcano_Java_Indonesia)

Preece, K., F.M. van der Zwan, J. Hammer & R. Gertisser (2023)- A textural perspective on the magmatic system and eruptive behaviour of Merapi Volcano. In: R. Gertisser at al. (eds.) Merapi volcano- geology, eruptive activity, and monitoring of a high-risk volcano. Springer Nature, Berlin, p 265-289.
(Textural analysis of phenocryst crystals in Merapi volcanic rocks)

Priadi, B., I.G.B.E. Sucipta, R.Mulyana & J.Xu (2009)- Products of Lamongan volcano (East Java, Indonesia): indication of gradual magmatic changes from continental to subduction-related system. Proc. 38th Annual Conv. Indonesian Association Geologists (IAGI), Semarang, 1p. *(Abstract only)*
(online at: https://www.iagi.or.id/web/digital/26/2009_IAGI_Semarang_Products-of-Lamongan.pdf)
(Lamongan is small volcano between Bromo-Tengger and Iyang volcanic ranges in E Java Supposed to be Plio-Pleistocene in age and characterized by occurrence of maar-lakes. Apparent volcanic succession from continental type magmatism to magmas of subduction character, possibly related to underlying microcontinent?)

Priadi, B., I. Zulkarnain & H. Permana (2004)- Volcanism and submarine hydrothermal activities around Krakatau island in Sunda Strait, Indonesia Proc. 5th International Conference on Asian Marine Geology, Bangkok 2004, p.

Priyanto, W.S., J.E. Hunt, M. Hanif, D.R. Tappin, H. Permana, Susilohadi, M. Cassidy & E. Yulianto (2021)- Bathymetry and shallow seismic imaging of the 2018 flank collapse of Anak Krakatau. Frontiers in Earth Science 8, 577448, p. 1-13.
(online at: www.frontiersin.org/articles/10.3389/feart.2020.577448/full)

Purbawinata, M.A. (1988)- Some geochemical aspects from Guntur Gandapura volcanic center, West Java, Indonesia. Geological Society of New Zealand, Miscellaneous Publication 41a, 124

Purbawinata, M.A. (1990)- Petrology and geochemistry of the Guntur- Gandapura volcanic complex, West Java, Indonesia. Ph.D. Thesis, University of Otago, New Zealand, p. 1-346.

Purbawinata, M. & E. Kadasetia (1991)- Petrologi dan geokimia Gunungapi Ciremai, Jawa Barat. Proc. 20th Annual Conv. Indonesian Association Geologists (IAGI), Jakarta, p. 38. *(Abstract only)*
(Petrology and geochemistry of Ciremai volcano, West Java'. Active Ciremai volcano 90km E of Bandung, 190km above Wadati-Benioff zone, with three periods of volcanism. Calc-alkaline volcanics with SiO2 50-68 Wt%. Etc.)

Purbawinata, M., A. Ratdomopurbo, A. Sinulingga, I.K. Sumarti & S. Suharno (1997)- Merapi volcano- a guide book. Volcanological Survey Indonesia, Bandung, p. 1-63.

Purbo-Hadiwidjoyo, M.M. & I. Suryo (1980)- Distribution pattern of the Merapi volcanic debris, south central Java with special reference to the period since 1900. Seminar Volcanic Debris Flow, Yogyakarta 1980, Volcanological Survey of Indonesia, p. 276-291.

Purnomo, B.J. & T. Pichler (2014)- Geothermal systems on the island of Java, Indonesia. J. Volcanology Geothermal Research 285, p. 47-59.
(online at: https://media.suub.uni-bremen.de/bitstream/elib/8188/1/Purnomo_Pichler_Geothermal%20systems%20on%20the%20island%20of%20Java%2C%20Indonesia_2014_accepted-version.pdf)
(Two types of geothermal systems on Java, volcano-hosted and fault-hosted)

Purwantara, S., A. Ashari, K.Hadi, Kuncoro & E.P.N Saputro (2025)- The palaeogeographic evolution of the Wonosobo volcanic area and its impacts on ancient life in the cradle of the Javanese civilization. Southeast Asian Studies14, 2, p. 313-339.
(online at: https://englishkyoto-seas.org/wp-content/uploads/SEAS1402_Purwantara.pdf)
(Geomorphological study of Wonosobo Volcanic Area (WVA) in C Java, with three main volcanic complexes: Sumbing and Sundoro twin active stratovolcanoes and Dieng Volcanic Complex. Evolution of volcanoes influenced important sites for ancient Mataram Kingdom, with Dieng Hindu-Buddhist Temple Complex, etc.)

Putra, S.D.H., R. Rizki & A.F. Akbar (2014)- Volcanostratigraphic study and its implication to the geothermal resource estimation of Mount Wilis, East Java. Proc. 3rd Int. Geothermal Workshop, ITB, Bandung 2014, 7p.
(online at: https://www.academia.edu/download/36640988/Volcanostratigraphic_Study_and_Its_Implication_to_The_Geothermal_Resource_Estimation_of_Mount_Wilis__East_Java1.pdf)
(Wilis volcano in E Java inactive since 1600 A.D. Volcanic rocks deposition since E Pleistocene)

Putriastuti, M., T. Yudistira, A.D. Nugraha, S. Widiantoro & J.P. Metaxian (2017)- Ambient noise tomography of Merapi complex, Central Java, Indonesia: a preliminary result. In: Southeast Asian Conference on Geophysics, Bali 2016, IOP Conference Series: Earth and Environmental Science 62, 012040, p. 1-6.
(online at: http://iopscience.iop.org/article/10.1088/1755-1315/62/1/012040/pdf)
(Ambient noise seismic velocity tomography around Mt. Merapi show pronounced NNW-SSE positive anomaly from under Mt. Merapi to Mt. Merbabu, interpreted as old basaltic lava. Negative anomalies in E and W flanks)

Qayyima, K.P., I.G.B.E. Sucipta, K.F. Hasan, I.A. Kurniawan, M. Abdurrachman, A. Saepuloh & V. Susanto (2025)- Influence of continental crust in the magmatic process of the Sunda-Tangkubanperahu Volcanic Complex, West Java, Indonesia. Proc. 3rd International Seminar on Earth Sciences and Technology (ISEST 2024), Bandung, IOP Conference Series: Earth and Environmental Science 1472, p. 1-8.
(online at: https://iopscience.iop.org/article/10.1088/1755-1315/1472/1/012011/pdf)
(Geochemical signatures of Pre-Sunda, Sunda, and Tangkubanperahu volcanoes indicate possible (continental) crustal contamination beneath W Java during magmatic evolution)

Queisser, M., M.R. Burton, F. Arzilli, A. Chiarugi, G.I. Marliyani, F. Anggara & A. Harijoko (2017)- CO_2 flux from Javanese mud volcanism. J. of Geophysical Research: Solid Earth 122, 6, p. 4191-4207.
(online at: www.ncbi.nlm.nih.gov/pmc/articles/PMC5586201/pdf/JGRB-122-4191.pdf)
(CO_2 fluxes of Bledug Kuwu mud volcano in Kendeng zone, C Java. Expelled gas is rich in CO_2, with volume fraction at least 16%. Source of CO_2 at Bledug Kuwu likely mixture of thermogenic, biogenic, and magmatic CO_2, with faulting controlling potential pathways for magmatic fluids)

Ramdhan, M., S. Widiyantoro, A.D. Nugraha, A. Saepuloh, J.P. Metaxian, S. Kristyawan et al. (2017)- Seismic travel-time tomography beneath Merapi volcano and its surroundings: a preliminary result from DOMERAPI Project. Proc. Southeast Asian Conference on Geophysics, Bali 2016, IOP Conference Series: Earth and Environmental Science 62, 012039, p. 1-6.
(online at: http://iopscience.iop.org/article/10.1088/1755-1315/62/1/012039/pdf)
(New tomographic imaging shows higher resolution at shallow depths (<35 km) below Merapi volcano, C Java. Magma reservoirs detected at ~27km and 12km depth. Dipping low velocity material rises from ~100km depth)

Ramdhan, M., S. Widiyantoro, A.D. Nugraha, J.P. Metaxian, N. Rawlinson, A. Saepuloh et al. (2019)- Detailed seismic imaging of Merapi volcano, Indonesia, from local earthquake travel-time tomography. J. Asian Earth Sciences 177, p. 134-145.
(New high resolution tomographic images for Merapi and Merbabu volcanoes show shallow (5 km) and intermediate (15 km) depth magma bodies beneath Merapi and none underMerbabu)

Ratdomopurbo, A. (1995)- Etude sismologique du volcan Merapi et formation du dome de 1994. Ph.D. Dissertation. Universite Joseph-Fourier- Grenoble I, France, p. 1-208.
(online at: https://theses.hal.science/tel-00711136)
('Seismological study of the Merapi volcano and the dome formation of 1994')

Ratdomopurbo, A., F. Beauducel, J. Subandriyo, I.G.M.A. Nandaka, C.G. Newhall, Suharna, D.S. Sayudi, H. Suparwaka & Sunarta (2013)- Overview of the 2006 eruption of Mt. Merapi. J. Volcanology Geothermal Research 261, p. 87-97.

Ratdomopurbo, A. & G. Poupinet (2000)- An overview of the seismicity of Merapi volcano (Java, Indonesia), 1983-1994. J. Volcanology Geothermal Research 100, p. 193-214.
(Discussion of seismic events at Merapi volcano from 1983-1994, when four major eruptive events occurred in 1984, 1986, 1992 and 1994. Explosive eruptions in 1984 and 1992 preceded by deep and shallow volcanotectonic earthquakes, but 1986 and 1994 eruptions were not. Aseismic zone between 1.5-2.5 km below summit probably small shallow magma reservoir)

Reck, H. (1931)- Ein Ruckblick auf den Ausbruch des Krakatau von 1928-1930. Zeitschrift fur Vulkanologie, Berlin, 14, p. 118-134.
('A look-back at the eruption of the Krakatau from 1928-1930'. Overview mainly based on work by C. Stehn. Seven eruption periods between late 1928-1930 (Stehn counted 14))

Reck, H. (1931)- Der Merapi-Vulkan auf Java und sein Ausbruch im Dezember 1930. Die Naturwissenschaften 19, p. 369-373.
('The Merapi volcano on Java and its eruption in December 1930'. About 1300 people killed during 1930 Merapi eruption)

Reck, H. (1935)- Der Ausbruchcyklus des Merapi in den Jahren 1933/34. Die Naturwissenschaften 23, p. 812-816.
('The eruption cycle of the Merapi in the years 1933/1934')

Reubi, O., I.A. Nicholls & V.S. Kamenetsky (2002)- Early mixing and mingling in the evolution of basaltic magmas: evidence from phenocryst assemblages, Slamet volcano, Java, Indonesia. J. Volcanology Geothermal Research 119, p. 255-274.
(Slamet volcano basalts studied and subdivided in two groups: Old Slamet (OS) and New Slamet (NS))

Richard, J.J. (1935)- Enkele aantekeningen omtrent den Gg Raoeng op Java. Leidsche Geologische Mededelingen 7, p. 1-40.
(online at: https://repository.naturalis.nl/pub/506013/LGM1935007001001.pdf)
('Some notes on the Raung volcano in E Java'. Rel. extensive description of Raung volcano in E Java around 1927-1933, by J. Richard, 'honorary assistant' of Volcanological Survey in 1933, working with C.E. Stehn and M. Neumann van Padang. Central cone within Raung crater was active in 1903-1904, 1913 and in August-September 1927, but with shifts in eruption points (Akkersdijk and Ecoma Verstege observations in 1927))

Rohiman, Y., I.G.B.E. Sucipta, M. Abdurrachman & S.R.A. Sugiono (2016)- Petrogenesis of Malabar Volcano, West Java, Indonesia. Proc. 14th Regional Conference Geology and Mineral Resources of SE Asia (GEOSEA XIV) and 45th Annual Conv. Indonesian Association Geologists (IAGI) (GIC 2016), Bandung, p. 295-300.
(online at: https://www.researchgate.net/publication/312198072_Petrogenesis_of_Malabar_Volcano_West_Java_Indonesia)

(Samples from Malabar, Gambung, Wayang and Bedil volcanoes show 8 units of lava and pyroclastics, erupted from 4 different vents. SiO2 from 59- 64.%, K2O 1.3- 1,6.% (medium-K series), Etc.)

Sabila, F.S.N. & M. Abdurrachman (2020)- Mekanisme pembentukan struktur geologi di Gunung Raung, Provinsi Jawa Timur. Jurnal Teknologi Sumberdaya Mineral 1, 1, p. 1-10.
(online at: https://jurnal.unej.ac.id/index.php/JENERAL/article/view/21558)
('The mechanism of geological structure formation at Mount Raung, East Java')

Saepuloh, A., K. Koike M. Omura, M. Iguchi & A. Setiawan (2010)- SAR- and gravity change-based characterization of the distribution pattern of pyroclastic flow deposits as Mt. Merapi during the past 10 years. Bulletin of Volcanology 72, p. 221-232.
(online at: https://asepsaepuloh.com/wp-content/uploads/saepuloh_springer2010.pdf)
(Mt. Merapi in C Java erupted frequently and produced pyroclastic flows following collapse of summit lava dome. SAR data used for distribution patterns of pyroclastic flow deposits. Collapse pattern followed change from S to the W, interpreted to originate from inclination of the conduit and formation of magma reservoirs)

Sahay, S., J.K. Pati, A.K. Singh, A. Niyogi, M. Chakarvorty, K. Prakash & M.M. Dwivedi (2023)- Characterization of ash samples from the Kelud (Indonesia) volcanic eruption of 2014 and its environmental implications. J. Geological Society India 99, p. 487-494.
(online at: https://www.researchgate.net/publication/370254681_Characterization_of_Ash_Samples_from_the_Kelud_Indonesia_Volcanic_Eruption_of_2014_and_its_Environmental_Implications)
(Eruptions from Kelud (Kelut) volcano in E Java in February, 2014 ejected huge amount of volcanic ash to an altitude of >26 km and spread to >700 km, leading to disruption of flights, destruction and ecosystem degradation. Analysis of 3 ash samples from roof tops in Yogyakarta shows basaltic andesite island arc affinity)

Saibi, H., E. Aboud, A. Setyawan, S. Ehara & J. Nishijima (2012)- Gravity data analysis of Ungaran Volcano, Indonesia. Arabian J. Geosciences 5, 5, p. 1047-1054.
(Hot springs around Ungaran volcano structurally controlled and from depths of 1-3 km)

Salni, M.A.S., E.T. Yuningsih & T. Ohba (2023)- Magmatic evolution and plumbing system of Gede-Salak Volcano, Banten, Indonesia. Indonesian J. on Geoscience (IJOG) 10, 2, p. 245-276.
(online at: https://ijog.geologi.esdm.go.id/index.php/IJOG/article/view/970/428)
(Magma evolution and plumbing system of Gede-Salak Volcano in W Java with two magma types: A (lava flows and peripheral dome) and B (summit dome). Plumbing system three magma series, felsic, intermediate and mafic.Magma type A resulted from multiple mafic recharges of felsic series; type B resulted from mixing of intermediate and mafic series. Felsic and intermediate phenocryst crystallization in mid-crust at 14 -17 km depth; mafic series resides in lower crust at 21 km depth)

Santoso, N.A., S. Bijaksana, K. Kodama, D. Santoso & D. Dahrin (2017)- Multimethod approach to the study of Recent volcanic ashes from Tengger Volcanic Complex, Eastern Java, Indonesia. Geosciences (MDPI) 7, 3, 63, p. 1-12.
(online at: http://www.mdpi.com/2076-3263/7/3/63)
(Comparison of ashes from 2010 eruption of Bromo, with two older tuff layers from same caldera: Widodaren Tuff (1.8 ka) and Segarawedi Tuff (33 ka))

Sauqi, F., M. Abdurrachman & I.A. Kurniawan (2022)- The role of crystal fraction to relative magma viscosity: an approach to understand the explosive caldera-forming volcanism of Raung Volcano. Proc. 4th Int. Conf. Transdisciplinary Research on Environmental Problems in Southeast Asia (TREPSEA-2021), IOP Conference Series: Earth and Environmental Science 1027, 012019, p. 1-9.
(online at: https://iopscience.iop.org/article/10.1088/1755-1315/1027/1/012019/pdf)

Saviano, D. (2020)- Reconstruction of the 2018 Anak Krakatau collapse using PlanetScope imaging and numerical modeling. Master's Thesis, Michigan Technological University, p. 1-98.
(online at: https://digitalcommons.mtu.edu/etdr/989)

(Anak Krakatau sector collapse on 22 December 2018, after start of new intense activity phase on 30 June 2018, and 7 lava flows developed between July and November 2018. Destroyed most of Anak Krakatau edifice)

Sayudi, D.S., R. Mulyana & R. Sukhyar (1990)- Geokimia dan petrogenesa basalt kompleks Gunungapi Lamongan- Jawa Timur. Proc. 19th Annual Conv. Indonesian Association Geologists (IAGI), Bandung, 2, p. 220-246.
(online at: https://www.iagi.or.id/web/digital/48/19th-(11-13-Des-1990)-Book-II-208-234.pdf)
('Geochemistry and petrogenesis of the basalt complex of Lamongan volcano, E Java'. Multiple eruption centers, basaltic lavas)

Scher, S. (2012)- Fumarolic activity, acid-sulfate alteration and high sulfidation epithermal precious metal mineralization in the crater of Kawah Ijen Volcano (Java, Indonesia). M.Sc. Thesis McGill University, Montreal, p. 1-114.
(online at: digitool.library.mcgill.ca/dtl_publish/7/110439.html)

Scher, S., A.E. Williams-Jones & G. Williams-Jones (2013)- Fumarolic activity, acid-sulfate alteration, and high sulfidation epithermal precious metal mineralization in the crater of Kawah Ijen Volcano, Java, Indonesia. Economic Geology 108, 5, p. 1099-1118.
(Kawah Ijen crater in E Java ~1 km in diameter, and hosts one of world's largest hyperacidic lakes. With small actively degassing solfatara field, surrounded by much larger area of acid-sulfate alteration. Area exposed after phreatomagmatic eruption in 1817, which excavated crater to depth of 250m. Magmatic vapors caused (uneconomic) high sulfidation epithermal Cu-Au-Ag ore deposits at very shallow depth)

Schmidt, K.G. (1934a)- Die Schuttstrome am Merapi auf Java nach dem Ausbruch von 1930. De Ingenieur in Nederlandsch-Indie (IV) 1, 7, p. IV.91- IV.120.
(online at: https://www.stichtingblauwelijn.nl/assets/files/1934-07.pdf)
('The debris flows at Merapi after the eruption of 1930'. Detailed report(s) on 1930-1931 lahar deposits at West side of Merapi volcano, Central Java, by Dienst van den Mijnbouw engineer Dr. K.G. Schmidt. Mainly valley-fill block deposits)

Schmidt, K.G. (1934b)- Die Schuttstrome am Merapi auf Java nach dem Ausbruch von 1930 (Vervolg). De Ingenieur in Nederlandsch-Indie (IV) 1, 8, p. IV.123- IV.134.
(online at: https://www.stichtingblauwelijn.nl/assets/files/1934-08.pdf)
('The debris flows at Merapi after the eruption of 1930 (Continuation)'. Part 2 of report(s) on 1930-1931 lahar deposits at South side of Merapi volcano, by K.G. Schmidt))

Schmidt, K.G. (1934c)- Die Schuttstrome am Merapi auf Java nach dem Ausbruch von 1930 (Vervolg en Slot). De Ingenieur in Nederlandsch-Indie (IV) 1, 9, p. IV.143- IV.171.
(online at: https://www.stichtingblauwelijn.nl/assets/files/1934-08.pdf)
('The debris flows at Merapi after the eruption of 1930 (Continuation and End)'. Part 3 of report(s) on 1930-1931 lahar deposits in rivers affected by volcanic debris: Batang, Senowo, Blongkeng, Lamat, Progo)

Schneider, C.F.A. (1885)- Ueber den vulkanischen Zustand der Sunda- Inseln und der Molukken im Jahre 1884. Jahrbuch Kaiserlich-Koniglichen Geologischen Reichsanstalt, Wien, 35, 1, p. 1-26.
(online at: https://www.zobodat.at/pdf/JbGeolReichsanst_035_0001-0026.pdf)
('On the volcanoes situation of the Sunda Islands and the Moluccas in the year 1884. Review of volcanic activity mainly on Java. Argues that magnitude of disastrous 1883 eruption of Krakatau was exagerrated)

Scrivenor, J.B. (1929)- The mudstreams ("lahars") of Gunong Keloet in Java. Geological Magazine 66, 10, p. 433-434.
(Brief report of observations on lahar deposits of Kelut volcano near Kediri in E Java, and its similarities to glacial deposits. Both are poorly sorted deposits with large blocks, but volcanic mudflows would be composed mostly or entirely of volcanic material)

Seibold, I. & E. Seibold (1996)- Charles Edgar Stehn: Der Ausbruch des Anak Krakatau im Mai 1933. Geologische Rundschau 85, 3, p. 615-618.
('Charles Edgar Stehn and the eruption of Anak Krakatau in May 1933'. Report on the monitoring of Krakatau activiiy by volcanologist C.E. Stehn and his team of the Netherlands Indies Volcanological Survey Department)

Self, S. (1992)- Krakatau revisited: the course of events and interpretation of the 1883 eruption. GeoJournal 28, 2, p. 109-121.
(Review of catastrophic Krakatau 1883 eruption cycle, starting with minor activity on 20 May, to climax on 27 August)

Self, S. & M.R. Rampino (1981)- The 1883 eruption of Krakatau. Nature 294, 5843, p. 699-704.
(Brief review of deposits of 1883 Krakatau eruption. Modest ignimbrite-forming event. Deposits mainly coarse, dacitic, non-welded ignimbrite. Large explosions produced pyroclastic flows that entered sea and produced tsunamis. Bulk volume of pyroclastic deposits (incl. co-ignimbrite ash) estimated as 18-21 km^3)

Selles, A., B. Deffontaines, H. Hendrayana & S. Violette (2015)- The eastern flank of the Merapi volcano (Central Java, Indonesia): architecture and implications of volcaniclastic deposits. J. Asian Earth Sciences 108, p. 33-47.
(Volcanoclastic facies architecture of E flank of Merapi (not impacted by major eruptions for nearly 2000 years))

Sendjaja, Y.A. & J.I. Kimura (2010)- Geochemical variation in Tertiary-Quaternary lavas of the West Java arc, Indonesia: steady-state subduction over the past 10 million years. J. Mineralogical and Petrological Sciences 105, 1, p. 20-28.
(online at: www.jstage.jst.go.jp/article/jmps/105/1/20/_pdf)
(Geochemistry and Sr-Nd-Pb isotopes of Miocene-Quaternary basaltic-andesitic lavas from W Java arc, which existed in current configuration since at least 15 Ma. Two parallel volcanic ranges: southern (VF; volcanic front) and northern (RA rear arc). Partial melting in mantle source greater in VF. Fluid addition to mantle greater in VF. Across-arc geochemical variation between Tertiary and Quaternary lavas does not differ, implying W Java arc has been in 'steady state' over past 10 My, with continuous subduction input from Indian Ocean sediments and continuous upwelling and replenishment of depleted mantle source from back arc)

Sendjaja, Y.A., J.I. Kimura & E. Sunardi (2009)- Across-arc geochemical variation of Quaternary lavas in West Java, Indonesia: mass-balance elucidation using arc basalt simulator model. Island Arc 18, 1, p. 201-224.
(W Java Arc segment of Sunda arc >10 Quaternary volcanic centers, above 120 to 200 km depth contours of Wadati-Benioff zone. Quaternary lavas range from basalt to dacite. Incompatible element abundances increase from volcanic front to rear-arc in response to change from low-K to high-K suites. Nd-Sr isotopes of basalts between mid-ocean ridge basalt (MORB) source mantle and Indian Ocean sediment compositions)

Setyawan, A., S. Ehara, Y. Fujimitsu, J. Nishijima, H. Saibi & E. Aboud (2009)- The gravity anomaly of Ungaran volcano, Indonesia: analysis and interpretation. J. Geothermal Research Soc. Japan 31, 2, p. 107-116.
(online at: www.jstage.jst.go.jp/article/grsj/31/2/31_2_107/_pdf)
(Positive Bouguer gravity anomaly over Old Ungaran volcano, which was active until >0.5 Ma, suggesting Ungaran formed in tectonic depression)

Shimozuru, D., T. Miyazaki, N. Gyoda & Johannes Matahelumual (1969)- Survey of Indonesian volcanoes, Part 2. Earthquake observations of Mt. Merapi. Bull. Earthquake Research Institute (Tokyo University) 47, 5, p. 969-990.
(online at: https://repository.dl.itc.u-tokyo.ac.jp/records/33355)
(Seismic recordings of volcanic earthquakes in August-September 1968 at N and S sides of Merapi, C Java, during time of growth and collapse of a lava dome. Most of volcanic earthquakes typical B-type earthquakes)

Sigurdsson, H., S. Carey, C. Mandeville & S. Bronto (1991)- Pyroclastic flows of the 1883 Krakatau eruption. EOS Transactions American Geophysical Union (AGU) 72, 36, p. 377-381.

(1990 marine geological investigation of Krakatau 1883 deposits show deposits mainly of pyroclastic flow origin (partially fluidized mixtures of particles and gases that travel up to 150 m/s, with internal temperatures up to 600°C). Density likely comparable to seawater. One well-known effect is generation of tsunamis)

Simkin, T. & R.S. Fiske (1983)- Krakatau 1883- the volcanic eruption and its effects. Smithsonian Inst. Press, Washington DC, p. 1-464.
(Thorough and well-illustrated account of 1883 Krakatoa eruption and its effects)

Simkin, T. & R.S. Fiske (1984)- Krakatau 1883: a classic geophysical event. In: C.S. Gilmor (ed.) History of Geophysics 1, American Geophysical Union (AGU), p. 46-48.
(online at: www.agu.org/books/hg/v001/HG001p0046/HG001p0046.pdf)

Sisson, T.W. & S. Bronto (1998)- Evidence for pressure-release melting beneath magmatic arcs from basalt at Galunggung, Indonesia. Nature 391, 6670, p. 883-886.
(Volatile content of primitive magmas from 1982-1983 eruption of Galunggung volcano in W Java indicates magmas derived from pressure-release melting of hot mantle peridotite, not from melting by hydrous fluids from subducting slab)

Sisson, T.W. & S. Bronto (1998)- Evidence for pressure-release melting beneath magmatic arcs from basalt at Galunggung, Indonesia. Proc. 27th Annual Conv. Indonesian Association Geologists (IAGI), Yogyakarta, 3 (Geodin., Magmat. Volkanologi), p. 78-83.
(online at: https://www.iagi.or.id/web/digital/56/60.pdf)
(Same as Sisson & Bronto 1998, above)

Siswowidjoyo, S., U. Sudarsono & A.D. Wirakusumah (1997)- The threat of hazards in the Semeru volcano region in East Java, Indonesia. J. Asian Earth Sciences 15, 2-3, p. 185-194.
(Semeru (3676 m) highest volcano in Java and one of most active. Activity almost continuous since 1967, manifested by mostly Strombolian-type eruptions with lava extrusions. Main dangers caused by lahars and non-volcanic debris flows related to heavy rainfall, which devastated large areas)

Siswowidjoyo, S., I. Suryo & I. Yokoyama (1995)- Magma eruption rates of Merapi volcano, Central Java, Indonesia during one century (1890-1992). Bulletin of Volcanology 57, 2, p. 111-116.
(Magma eruption rates of Merapi volcano rel. constant for last 100 years. Total lava discharged during this period >0.1 km^3. Length of magma conduit <10 km)

Siswowidjoyo, S., Tulus, A. Djumarma, A., J. Matahelumual, W.S. Tjetjep, I. Pratomo & I. Bahar (1985)- Kegiatan G. Merapi, Jawa Tengah, tahun 1984. Proc. 14th Annual Conv. Indonesian Association Geologists (IAGI), p. 181-192.
('Activities of Gunung Merapi, Central Java, in the year 1984')

Sitorus, K. (1990)- Volcanic stratigraphy and geochemistry of the Idjen caldera complex, East Java, Indonesia, Master Thesis, Victoria University, Wellington, New Zealand, p. 1-148. *(Unpublished)*

Sitorus, K. (1990)- Stratigrafi dan geokimia kaldera Idjen, Jawa Timur, Indonesia. Proc. 19th Annual Conv. Indonesian Association Geologists (IAGI), Bandung, 2, p. 247-291.
('Stratigraphy and geochemistry of the Idjen caldera, E Java'. Idjen is Krakatau-type collapsed caldera with diameter 11-14 km. Pre-caldera stratovolcano stage at ~0.3 Ma, built on basement of Miocene limestones. Basaltic-andesitic lavas and pyroclastic flows, etc.)

Situmorang, T. & R.D. Hadisantono (1992)- Peta geologi Gunungapi Gede, Cianjur, Jawa Barat. Direktorat Vulkanologi, Bandung.
(online at: https://vsi.esdm.go.id/gallery/picture.php?/71/category/8)
('Geologic map of the Gede volcano, Cianjur, West Java', 1:50,000)

Situmorang, T., R.D. Hadisantono & P. Asmoro (1995- Peta geologi Gunung Cereme, Jawa Barat, Skala 1:50000. Direktorat Vulkanologi, Bandung.
('Geologic map of the Ciremai volcano, West Java', scale 1:50,000))

Sleumer, W. (1925)- Op Java's vulkanen. S.L. van Looy, Amsterdam, p. 1-95.
(online at: https://resolver.kb.nl/resolve?urn=MMKB21:035926000:pdf)
('On Java's volcanoes'. Popular booklet about volcanoes on Java)

Soeria-Atmadja, R., R.C. Maury, H. Bellon, Y.S. Yuwono & J. Cotton (1988)- Remarques sur la repartition du volcanisme potassique Quaternaire de Java (Indonesie). Comptes Rendus Academie Sciences, Paris 307, ser. 2, p. 635-641.
('Remarks on the distribution of Quaternary potassic volcanism of Java (Indonesia)'. Pleistocene K-rich volcanoes behind active Sunda arc, at ~200-600 km above Benioff zone in E Java- Java Sea (Beser, Ringgit, Lurus, Muriah, Lasem, Bawean). Positions controlled by major faults oblique to Sunda arc axis. Origin ascribed to melting of mantle enriched in incompatible elements during previous events, e.g. Oligo-Miocene subduction beneath Java)

Soeria-Atmadja, R., M.E. Suparka & Y.S. Yuwono (1991)- Quaternary calc-alkaline volcanism in Java with special reference to Dieng and Papandayan- Galunggung complex. Proc. Int. Conf. Volcanology and Geothermal Techn., p. 1-10.

Soetoyo, H.R.D. (1992)- Geologic map of Tangkubanparahu volcano (Sunda Complex volcano), West Java. Volcanological Survey Indonesia, 1:50,000 scale.

Solikhin, A. (2015)- Geology, tectonics and post-2001 eruptive activity interpreted from high-spatial resolution satellite imagery: The case study of Merapi and Semeru volcanoes, Indonesia. Ph.D. Thesis Volcanology, Universite Blaise Pascal, Clermont-Ferrand, p. 1-232.
(online at: https://theses.hal.science/tel-01555688v1/file/SOLIKHIN_2015CLF22559.pdf)
(Study of recent eruptions of Merapi and Semeru volcanoes in Java from High-Spatial Resolution optical satellite and rdar images)

Solikhin, A., V. Pinel, J. Vandemeulebrouck, J.C. Thouret, & M. Hendrasto (2015)- Mapping the 2010 Merapi pyroclastic deposits using dual-polarization Synthetic Aperture Radar (SAR) data. Remote Sensing of Environment 158, p. 180-192. *(in Solikin (2015) thesis, online at: https://theses.hal.science/tel-01555688v1/file/SOLIKHIN_2015CLF22559.pdf))*

Solikhin, A., J.C. Thouret, A. Gupta, A.J.L. Harris & Soo Chin Liew (2012)- Geology, tectonics, and the 2002-2003 eruption of the Semeru volcano, Indonesia: interpreted from high-spatial resolution satellite imagery. Geomorphology 138, 1, p. 364-379. *(in Solikin (2015) thesis, online at: https://theses.hal.science/tel-01555688v1/file/SOLIKHIN_2015CLF22559.pdf))*
(Structural interpretation of satellite imagery shows four groups of faults orientated N40, N160, N75, and N105 to N140. Currently active Jonggring-Seloko vent of Semeru composite cone is buttressed against Mahameru edifice at head of large scar that may reflect failure plane at shallow depth and has potential for flank and summit collapse in future)

Spicak, A., V. Hanus & J. Vanek (2002)- Seismic activity around and under Krakatau volcano, Sunda Arc: constraints to the source region of island arc volcanics. Studia Geophysica Geodaetica (Prague) 46, p. 545-565.
(online at: www.ig.cas.cz/wp-content/uploads/2019/01/4_krakatau_sgg_2002.pdf)
(Almost columnar pattern of earthquake hypocenters down to upper boundary of subducting slab at depth of 100 km under Krakatau volcano is phenomenon not yet observed beneath any other volcano at convergent plate margins.This active seismic domain is separated both from Wadati-Benioff zone of subducting Indo-Australian plate and subduction-related fracture zones. Possibly related to bending of Sunda Arc in Sunda Strait area)

Suhendro, I., G.N.R.B. Naen, A. Gurusinga, S.A, Sari, M.L.A. Moktikanana, R.M.P.P. Gunawan et al. (2023)- Dynamics of the Young Merapi (<2.2 ka- 1,788 CE) pumice fall deposits: insights from textural and geochemical studies. J. Volcanology Geothermal Research 444, 107919, p. 1-22.
(online at: https://www.sciencedirect.com/science/article/pii/S0377027323001762)
(Nine pumice fall deposits of Young Merapi stage (<2.2 ka- 1,788 CE) in W and S flanks of Merapi volcano. All include variety of lithics (10-42%), with thicker deposits more lithic-rich. Two magma types; Type II magma erupting more explosively than Type I)

Sriwana, T., M.J. van Bergen, J.C. Varekamp, S. Sumarti, B. Takano, B.J.H. van Ose & M.J. Leng (2000)- Geochemistry of the acid Kawah Putih lake, Patuha Volcano, West Java, Indonesia. J. Volcanology Geothermal Research 97, p. 77-104.
(online at: www.academia.edu/20632635/Geochemistry_of_the_acid_Kawah_Putih_lake_Patuha_Volcano_West_Java_Indonesia)
(Kawah Putih summit crater of Patuha volcano, W Java, with shallow, 300m-wide lake with strongly mineralized acid-sulfate-chloride water. Lake waters mix of isotopically heavy fluids of deep origin and meteoric water. Acid fluid-induced processes at Patuha led to accumulation of elements commonly associated with volcano-hosted epithermal ore deposits)

Stehn, C.E. (1927)- Probebohrungen zur Gewinnung vulkanischer Energie in Niederlandisch-Indien. Zeitschrift fur Vulkanologie, Berlin, 11, 1, p. 53-55.
('Test wells for the exploitation of volcanic energy in the Netherlands Indies'. On the drilling of the first geothermal test wells in Indonesia in 1926, at Kawah Kamojang, a solfatara field in W part of Guntur volcano complex, W Java, to test the feasibily of steam production from volcanic heat for generation of electricity Other solfatara fields on Java, Sumatra and Sulawesi thought to have similar energy potential (although the first wells were successful, geothermal power generation was not pursued further at that time, as Java had suffucient power supply from hydroelectric schemes; JTvG))

Stehn, C.E. (1928)- Miniatur Lavastrome und Lavaspratzen im Papandajan-Krater? Centralblatt Mineralogie Geologie Palaontologie 1928, B4, p. 224-227.
(Miniature lava flows and lava spittings in the Papandayan crater?' Reports of these from Kawah Mas at Papandayan by W. Volz (1905) and K. Sapper are erroneous: not lava, but hardened dark sulfurous mud)

Stehn, C.E. (1928)- De Krakatau en zijn jongste eruptie. De Ingenieur, M. Mijnbouw, 1928, 43, M75-M77.
(online at: https://resolver.kb.nl/resolve?urn=dts:2945104:mpeg21:pdf)
('The Krakatau and its latest eruption'. Summary of review/presentation in Bandung 6 June 1928. Renewed activity of Krakatau started on 29 December 1927- 5 February 1926; with eruption up to 1200m high. Permanent observation from Lang Eiland started on 11 January 1928. On 26 January first emergence of crater edge above sea, but soon disappeared after erosion during quiet period. Second eruption period 25 March-1 April and 13 April-15 May (Anak Krakatau still under water)

Stehn, C.E. (1929)- The geology and volcanism of the Krakatau Group. Proc. 4th Pacific Science Congress, Java 1929, Excursion A1, Landsdrukkerij, Batavia, p. 1-55.
(Review of volcanic activity history of Krakatau from the earliest single andesite volcano long time ago, its collapse leaving four remnants, including the now-vanished Poolsche Hoed, formation of anew (eccentric) cone, activity in 1600s, 1800s, the major eruption in late August 1883 and its pumice deposits, restart of submarine volcanic activity in December 1927 until birth of the first Anak Krakatau on 26 January 1928, and continued activity until 1929)

Stehn, C.E. (1929)- Kawah Kamodjang. Proc. 4th Pacific Science Congress, Java 1929, Excursion C2, p. 1-13.
(online at: https://nla.gov.au/nla.obj-3043675846/view?partId=nla.obj-3043676325)
(Excursion to solfatara fields of the Kawah Kamojang volcano ruin, SE of Bandung. This is site of first successful geothermal pilot wells, after initial test wells in 1918-1927 (no further activity in geothermal exploration until 1970s, resulting in first geothermal power producting field at Kamojang in 1983; JTvG)))

Stehn, C.E. (1933)- Fünfzig Jahre Krakatau. Die Umschau, Illustrierte Wochenschrift Fortschritte Wissenschaft und Technik, Frankfurt, 37, 34, p. 659-663.
('50 years of Krakatau'. Review in popular German weekly science magazine)

Stehn, C.E. (1935)- De Merapi-bewaking. Volcanology Department, Dienst van het Mijnwezen, Bandung, p. 1-12.
('The Merapi Surveillance'. 12-page printed set of instructions in case of new Merapi eruptions, compiled by Volcanological Survey

Stehn, C.E. (1936)- Het gloedwolkgevaar bij den Keloed en de bescherming daartegen. De Bergcultures, Batavia, 10, 23, p. 715-723 and 10, 24, p. 747-757.
('The danger of nuee ardentes at the Kelud and protections against them')

Stehn, C.E. (1936)- Het eruptiegevaar van den G. Semeroe voor de ondernemingen op de vulkaanhelling. De Bergcultures, Batavia, 10, 39, p. 1184-1191.
('The danger of eruption of the G. Semeru for the plantations /estates on the volcano slope')

Stehn, C.E. (1936)- Beobachtungen an Glutwolken wahrend der erhohten Tatigkeit des Vulkans Merapi in Mittel Java in den Jahren 1933-1935. Handelingen 7e Nederlandsch-Indisch Natuurwetenschappelijk Congres, Batavia, p. 647–656.
('Observations on nuees ardentes (pyroclastic flows) during the increased activity of the Merapi volcano in Central Java in the years 1933-1935'. Two types observed on Merapi: (1)'Explosionsglutwolken' (explosion hot clouds) and (2) 'Absturzglutwolken' (avalance hot clouds, caused by collapse of oversteepened parts of a lava dome or lava flow))

Stehn, C.E. (1939)- De Krakatau-bewaking. Volcanology Department, Dienst van het Mijnwezen, Bandung.
('The Krakatau surveillance'. Unpublished manual for emergency procedures at t he Krakatau volcano, Sunda Straits. Part of a series of manuals for emergency management around Java's most active volcanoes, incl. Merapi (1935), Kelud, etc.)))

Stehn, C.E. & J.H. Coert (1929)- Keloet. Proc. 4th Pacific Science Congress, Java 1929, Excursion E21, Vorkink, Bandung, p. 1-37.
(Guidebook of excursion to Kelut volcano, E Java, the site of repeated disastrous lahar eruptions, the most significant one in May 1919)

Stehn, C.E., W.M. Docters van Leeuwen & K.W. Dammerman (1929)- Krakatau (Geologie, vulkanisme, flora en fauna). Proc. 4th Pacific Science Congress, Java 1929, Vorkink, Bandung, p. 57-118.
(Fieldtrip guide book on Krakatau volcano, in 3 parts: (1) The geology and volcanism of the Krakatau group (Stehn), (2) Krakatau's new flora (Docters van Leeuwen) and (3) Krakatau's new fauna (Dammerman))

Stimac, J., G. Nordquist, A. Suminar & L. Sirad-Azwar (2008)- An overview of the Awibengkok geothermal system, Indonesia. Geothermics 37, 3, p. 300-331.
(Awibengkok (Gunung Salak) geothermal system liquid-dominated, fracture-controlled reservoir, hosted mainly by andesitic-to-rhyodacitic rocks, floored by Miocene marine sedimentary rocks cut by igneous intrusions. Major volcanic peaks of area built from 860-180 ka, while ancestral andesitic cone that forms rim of Cianten Caldera to W active from ~1610 to 670 ka)

Stoehr, E. (1868)- Der Vulkan Tengger in Ost-Java, mit landschaftlicher Ansicht und einer Tafel geologischer Profile. Durkheim, p. 1-49.
(see also Dutch version in Tijdschrift voor Nederlandsch-Indie 1869, ser. 3, 3, 2, p. 258-290)
('The Tengger volcano in East Java')

Stoehr, E. (1878)- Die Provinz Banjuwangi mit der Vulkangruppe Idjen Raun in Ost-Java. Abhandlungen Senckenberg Naturforschenden Gesellschaft, Frankfurt, p. 1-120.

(online at: https://ia800303.us.archive.org/30/items/mobot31753003649065/mobot31753003649065.pdf)
('The Banyuwangi Province with the Ijen-Raun volcano group in East Java'. Early geographic- geologic description of easternmost part of Java, with focus on recent volcanoes)

Stoop, A. (1886)- Verslag over een onderzoek van den vulkaan Merapi op Java in Juli 1885. Natuurkundig Tijdschrift voor Nederlandsch-Indie 45, 4, p. 519-525.
(online at: https://ia800203.us.archive.org/19/items/mobot31753002486873/mobot31753002486873.pdf)
('Report on an investigation of the Merapi volcano on Java in July 1885'. With one map)

Subandriyo, R. Gertisser, N. Aisyah, H. Humaida, K. Preece, S. Charbonnier et al. (2023)- An overview of the large-magnitude (VEI 4) eruption of Merapi in 2010. In: R. Gertisser at al. (eds.) Merapi volcano- geology, eruptive activity, and monitoring of a high-risk volcano, Ch. 12, Springer Nature, Berlin, p. 353-407.
(online at: https://ris.utwente.nl/ws/portalfiles/portal/311754966/978_3_031_15040_1_12.pdf)
(Volcano Explosivity Index 4 eruption of Merapi in October-December 2010 was largest since 1872 and deadliest since 1930 (398 casualties). 2010 eruption fed by basaltic andesite magma, similar to earlier Merapi eruptions, but larger than normal influx of deep, volatile-rich magma that replenished shallow magma system within carbonate-dominated upper crust beneath Merapi. Lahars swept down almost all major valleys)

Subandriyo, M.C. Supriyati, Suharno & S. Subandini (1992)- The 1992 Merapi eruption viewed from seismic deformation data and lava doming process. Proc. 21st Annual Conv. Indonesian Association Geologists (IAGI), Yogyakarta 1992, p. 863-877.
(online at: https://www.iagi.or.id/web/digital/50/21th-Vol-II-(7-10-Des-1992)-493-508.pdf)
(Chronology of seismic and eruptive events in February-July 1992. With formation of andesitic lava dome of 2 million m^3 , reaching 6 million m^3 by July 1992))

Sudradjat, A. (1975)- Batuan gunungapi dan struktur geologi di Jawa Timur dan Nusatenggara Barat. Geol. Indonesia (IAGI) 2, 3, p. 19-22.
('Volcanic rocks and structure of East Java and West Nusatenggara')

Sudradjat, A. (1981)- The morphological development of Krakatau Volcano, Sunda Strait, Indonesia. IAVCEI and Volcanological Survey of Indonesia, p. 1-18.

Sudradjat, A. (1982)- The morphological development of Anak Krakatau Volcano, Sunda Strait. Geologi Indonesia (IAGI) 9, 1, p. 1-11.

Sudradjat, A. (1985)- The morphological development of Anak Krakatau Volcano, Sunda Strait. In: D. Sastrapradja et al. (eds.) Proc. Symposium on 100 years development of Krakatau and its surroundings, Jakarta 1983, Indonesian Inst. of Sciences (LIPI), p. 1-17.
(online at: https://sejarah.dibi.bnpb.go.id/uploads/arsip/20200929-Copy-of-05-3105---83-Krakatau_-The-morphological-development-of-karakatau-volcano,-sunda-strait-Indonesia-(1).pdf)

Sudradjat, A. (1991)- A preliminary account of the 1990 eruption of the Kelut Volcano. Geologisches Jahrbuch A 127, p. 447-462.
(On 1990 violent eruption of Kelud composite volcano in E Java, after being quiet for 33 years. About 120 km^2 of SW slope of volcano covered with 10-40 cm of tephra)

Sudradjat, A., I. Syafri & E.T. Paripurno (2010)- The characteristics of lahar in Merapi volcano, Central Java, as the indicator of explosivity during Holocene. Proc. 39th Annual Conv. Indonesian Association Geologists (IAGI), Lombok, p. 1-5.
(Investigation of relationship between characteristics of Merapi volcano lahars and activity. Five lahar units and 5 groups of Merapi activities can be distinguished)

Sudradjat, A., I. Syafri & E.T. Paripurna (2011)- The characteristics of lahar in Merapi Volcano, Central Java as the indicator of the explosivity during Holocene. Jurnal Geologi Indonesia 6, p. 69-74.

(online at: www.bgl.esdm.go.id/publication/index.php/dir/article_download/303)
(Same paper as Sudrajat et al. (2010))

Sudrajat, A. & R. Tilling (1984)- Volcanic hazards in Indonesia: the 1982-83 eruption of Galunggung. Episodes 7, 2, p. 13-19.
(online at: http://52.172.159.94/index.php/epi/article/view/64418/50348)

Suhendro, I., A.S. Al Aro, M.F. Palembang, A.P. Rahim & L.R. Sari (2023)- On the formation of lava flows and lava domes in mafic-intermediate magmas (Mount Ungaran, Central Java, Indonesia). J. Volcanology Seismology 17, p. 228-245
(Ungaran volcano in C Java. Lava dome formation, which requires a high magma viscosity, originates from longer-lived and more crystalline magma, whereas lava flow with low viscosity originates from young and less crystalline magma. In this case of mafic-intermediate magma, resultant lava morphology strongly controlled by abundance of phenocrysts and magma residence time)

Suhendro, I., M.A. Gurusinga, A.Toramaru, A. Harijoko, H.E. Wibowo, G.A. El-Zamzamy Latief et al.(2025)- Magma ascent dynamics and transport process of the Mt. Semeru lava dome that collapsed on 4th December 2021 (East Java, Indonesia). J. Volcanology Geothermal Research 467, 108432, p.
(Study of magma ascent dynamics and transport process of Mt. Semeru lava dome (E Java) that collapsed on 4th December 2021 and generated 15-km-long pyroclastic density currents that destroyed Supiturang Village)

Suhendro, I., M.N. Isnain& R. Wahyudi (2022)- Rock characteristics of post-caldera volcanoes in Dieng volcanic complex (DVC), Central Java, Indonesia. J. Geoscience Engineering Environment Technology (JGEET) 7, 4, p. 151-157.
(online at: https://journal.uir.ac.id/index.php/JGEET/article/view/10015/4787)
(Dieng volcanic complex post-caldera volcanoes classified as:(1) pyroclastic domain (Pagerkandang, Merdada, Pangonan); and (2) lava domain (Prambanan, Kendil, Pakuwaja, Sikunir, Sikarim, Seroja)

Sukarna, D. (2000)- Unsur langka dan kelompok platina basal Mg-tinggi Galunggung, Indonesia. Proc. 29th Annual Conv. Indonesian Association Geologists (IAGI), Bandung, 2, p. 23-36.
('The rare elements and platinum group of high-Mg basalts of Galunggung, Indonesia')

Sukhyar, R. (1989)- Geochemistry and petrogenesis of arc rocks from Dieng, Sundoro and Sumbing volcanic complexes, central Java, Indonesia. Ph.D. Thesis, Monash University, Melbourne, p. 1-319. *(Unpublished)*

Sukhyar, R. (1991)- Chemistry of arc rocks from Dieng, Sundoro and Sumbing volcanic complexes: crustal contamination versus chemical heterogeneity in mantle. Proc. 20th Annual Conv. Indonesian Association Geologists (IAGI), Jakarta, p. 326-339.
(online at: https://www.iagi.or.id/web/digital/49/20th-(10-12-Des-1991)-22.pdf)
(K2O contents of Dieng biotite andesite generally higher that Sumbing and Sundoro andesites)

Sukhyar, R., N.S. Sumartadipura & W. Effendi (1986)- Geologic map of Dieng volcano complex, central Java. Volcanological Survey Indonesia, Bandung, p.
(online at: https://vsi.esdm.go.id/gallery/picture.php?/70/category/8)

Sukhyar, R., N.S. Sumartadipura & R.D. Erfan (1992)- Geologic map of Sundoro volcano, Central Java. Volcanological Survey Indonesia, Bandung.
(online at: https://vsi.esdm.go.id/gallery/picture.php?/83/category/8)

Sulaksana, N., E. Sukiyah, A. Sudradjat & I. Syafri (2014)- The crater configuration of Kelud volcano, East Java, Indonesia after the 2014 eruption. Int. J. Science and Research (IJSR) 3, 3, p. 419-422.
(online at: https://www.ijsr.net/archive/v3i3/MDIwMTMxMTQx.pdf)
(Kelud volcano in E Java erupted on April 14, 2014 and destroyed 2006-2007 lava dome, which measured 200x300m. New hole left by April 14 eruption occupied 70% of lava dome with diameter of 175 m)

Sunardi, E. & J.I. Kimura (1998)- Temporal chemical variations in late Cenozoic volcanic rocks around the Bandung Basin, West Java, Indonesia. J. Mineralogy Petrology Economic Geology, Tokyo, 93, 4, p. 103-128.
(online at: www.jstage.jst.go.jp/article/ganko/93/4/103/_pdf)
(Bandung Basin on axis of Sunda arc in W Java. Underlain by young basaltic-dacitic volcanics with ~4.1 Ma-Recent K-Ar ages. Trace elements suggest continuous cooling of mantle wedge, with resurgence of degree of melting between ~1.1- 0.6 Ma, same time as axial uplift in Sunda arc and may be due to kinematic change in subduction of Indian-Australian Plate beneath Sunda arc)

Sunardi, E. & R.P. Koesoemadinata (1999)- New K-Ar ages of the magmatic evolution of the Sunda-Tangkuban Perahu volcano complex formation, West Java, Indonesia. In: I. Busono & H. Alam (eds.) Developments in Indonesian tectonics and structural geology, Proc. 28th Annual Conv. Indonesian Association Geologists (IAGI), Jakarta, 1, p. 63-72.
(online at: https://www.iagi.or.id/web/digital/63/6.pdf)
(New K-Ar whole rock ages between ~4 Ma ± 0.04 Ma of Sunda- Tangkuban Perahu volcano complex)

Suparka, E. (2012)- Petrologi dan geokimia: model magmatisme Kenozoik Pulau Jawa. Institut Teknologi Bandung (ITB), Special Publication?, p. 1-43.
('Petrology and geochemical model of Cenozoic magmatism on Java Island')

Suparka, E., C.I. Abdullah, P. Senjaya, J. Hutabarat, A.I. Kurniawan et al. (2011)- PGA analyses of incompatible B (Boron) trace element of the Quaternary volcanic rocks of the Sunda-Banda Arc: case study volcanic complex Banten area, West Java. Proc. Joint 36th HAGI and 40th IAGI Annual Conv., Makassar, JCM2011-238, p. 1-9.
(Samples of Quaternary volcanics from Banten area, SW Java, vary from basaltic, andesitic to dacitic composition. Boron content 7 ppm in basaltic rocks, 3 - 17 ppm in andesitic rocks, and ~7 ppm (for dacitic?))

Supriyadi, S., A. Saepuloh, H. Mahardika & W. Srigutomo (2025)- Characterization of Java Island's volcanoes based on volcano density and quantification of volcanic products using Landsat imagery. Geosystems and Geoenvironment 4, 3, 100398, p. 1-14.
(online at: https://www.sciencedirect.com/science/article/pii/S2772883825000482)
(Landsat study of 34 volcanoes on Java: volcano density, delineation of volcanic products on 17 Type A volcanoes, etc. Highest volcano density observed in West Java. Etc.)

Surono, P. Jousset, J. Pallister, M. Boichu, M.F. Buongiorno, A. Budisantoso, F. Costa, S. Andreastuti, S. Prata & F. Schneider (2012)- The 2010 explosive eruption of Java's Merapi volcano- a '100-year' event. J. Volcanology Geothermal Research 241-242, p. 121-135.
(online at: https://hal-insu.archives-ouvertes.fr/insu-00723412/document)
(Merapi volcano known for frequent small-moderate eruptions and pyroclastic flows produced by lava dome collapse. In 2010 largest and most explosive eruptions in more than century, fed by rapid ascent of magma from 5-30 km depths. Eruptive behavior related to seismicity along fault >40 km from volcano)

Suryo, I. (1980)- Lahars in Indonesia. In: Volcanic hazard zoning, contributions from Indonesia, UNESCO, p. 1-19.

Suryo I. (1981)- Report on the volcanic activity in Indonesia during the period 1961-1963. Bull. Volcanological Survey of Indonesia 104, p. 1-108.

Suryo I. (1985)- Report on the volcanic activity in Indonesia during the period 1964-1970. Bull. Volcanological Survey of Indonesia 106, p. 1-150.

Suryo, I. & M.C.G. Clarke (1985)- The occurrence and mitigation of volcanic hazards in Indonesia as exemplified at the Mount Merapi, Mount Kelut and Mount Galunggung volcanoes. Quarterly J. Engineering Geology and Hydrogeology 18, 1, p. 79-98.

(online at: https://booksc.org/book/10173323/975ad3)
(Review of volcanic hazards associated with eruptions at Java's most active volcanoes (Merapi, Kelut, Galunggung): lava flows, volcanic blocks and bombs, nuees ardentes, crater lake generated lahars, rain lahars, ash plumes, poisonous gas accumulations and tidal waves or tsunamis)

Susetyono, M.T. & L.D. Setijadji (2021)- Study of active and fossil hydrothermal systems in Ijen caldera complex and Merubetiri Mountains, East Java. Indonesian J. of Economic Geology (IJEG) 1, 1, p. 23-38.
(online at: https://journal.iagi.or.id/index.php/IJEG/article/viewFile/340/348)
(About hydrothermal systems and relations to volcanic activity and geological structures, and mineral deposits related to hydrothermal systems)

Sutarto, A. Sulaksono, D.T. Laksana, A.M. Rangkuti, A.P. Setyahadiwibowo & Ediyanto (2023)- Geochemistry and petrographic signature of the back arc alkaline mafic rocks at Muria Volcanic Complex, Central Java, Indonesia. Proc. 4th Int. Conference on Earth Science Mineral and Energy, Sleman 2021, AIP Conference Proceedings 2598, p.
(Muria Volcanic Complex on north coast of C Java is situated behind Pleistocene-Recent Sunda-Banda arc. Can be divided into Genuk Complex (Old Muria; mostly shoshonitic series) and Muria Complex (Young Muria; leucititic). Muria magmatism formed by mixing of overriding mantle wedge and slab breakoff partial melting)

Sutarto, D.F. Yudiantoro, Suharwanto, M. Abdurrachman, T. Wikaningrum, M.Apriniyad et al. (2024)- Characteristics of pyroclastic deposits and evolution of Maar Bethok Lamongan Volcano Tiris Probolinggo East Java Indonesia. Proc. 6th Int. Conference Earth Science Mineral and Energy, Yogyakarta, IOP Conference Series: Earth and Environmental Science 1339, 2023, p.
(online at: https://iopscience.iop.org/article/10.1088/1755-1315/1339/1/012002/pdf)
(Lamongan volcano Complex in E Java differs from other Java volcanoes, having 37 volcanic cones and 27 volcanic lakes (maars, ranu). Maar Bethok exposes olivine-pyroxene basalts and pyroclastic fall deposits. Volcanism started with alkaline magma of island arc calc-alkaline affinity and ended with more acidic composition)

Sutawidjaja, I.S. (1997)- The activities of Anak Krakatau volcano during the years of 1992-1996. Annuals Disaster Prevention Research Institute, Kyoto University, 40 B-1, p. 13-22.
(online at: https://www.dpri.kyoto-u.ac.jp/nenpo/no40/40s0/a40s0p03.pdf)
(Eruptive activity cycle of Anak Krakatau in 1992-1996 with lava flows and tephra eruptions, producing >12 million m3 of erupted materials)

Sutawidjaja, I.G. (2006)- Pertumbuhan gunung api Anak Krakatau setelah letusan katastrofis 1883. Jurnal Geologi Indonesia 1, 3, p. 143-153.
(online at: www.bgl.esdm.go.id/dmdocuments/jurnal20060303.pdf)
(Since appearance in 1929, Anak Krakatau Volcano has grown to 315 m high in 2005 (av. 4m/ year). Latest volume measurement in 2000 was 5.52 km^3)

Sutawidjaja, I.S., D. Aswin & K. Sitorus (1985)- Geologic map of Slamet Volcano, Central Java, scale 1: 50.000. Volcanological Survey of Indonesia, Bandung.

Sutawidjaja, I.G. & R. Sukhyar (2009)- The cinder cones of Mount Slamet, Central Java, Indonesia. Proc. 38th Annual Conv. Indonesian Association Geologists (IAGI), Semarang, p. 1-21. *(also as Indonesian J. on Geoscience (IJOG) 4, 1, p. 57-75)*
(online at: https://ijog.geologi.esdm.go.id/index.php/IJOG/article/view/70/70)
(Mount Slamet volcanic field in C Java with 35 partly degraded cinder cones up to 185m high on E flank and E side of volcano. Most cinder cones lie on Tertiary sediments, along NW-trending fault system and on radial fractures. K-Ar age of scoria bomb 0.042 + 0.02 Ma)

Sutawidjaja, I.S., D. Wahyudin & E. Kusnidar (1996)- Peta geologi Gunungapi Semeru, Jawa Timur. Direktorat Vulkanologi, Bandung.

(online at: https://vsi.esdm.go.id/gallery/picture.php?/80/category/8)
('Geologic map of the Semeru volcano, East Java')

Symons, G.J. (ed.) (1888)- The eruption of Krakatoa and subsequent phenomena. Report of the Krakatoa Committee of the Royal Society, London. Trubner & Co, London, p. 1-494.
(online at: https://books.google.com.na/books?id=Vk8PAAAAYAAJ)
(Royal Society of London report on 1883 Krakatau eruption. More focused of physical and global meteorological phenomena than the volcano/geology-focused texts of Verbeek))

Taher, M.R., M. Abdurrachman, I.A. Kurniawan, E. Suparka, A. Susanto & H.E. Putra (2020)- Volcano-stratigraphy of Anak Krakatau volcanic complex (Indonesia) and comparison between the 2018 Anak Krakatau eruption and the 1883 Krakatau eruption. In: F. Lucci et al. (eds.) Selected studies in geomorphology, sedimentology, and geochemistry. Proc. 3rd Conference Arabian J. Geosciences (CAJG 2020), Springer Advances in Science Technology & Innovation, p. 75-78

Takano B., K. Suzuki, K. Sugimori, T. Ohba, S.M. Fazlullin, A. Bernard, S. Sumarti, R. Sukhyar & M. Hirabayashi (2004)- Bathymetric and geochemical investigation of Kawah Ijen Crater Lake, East Java, Indonesia. J. Volcanology Geothermal Research 135, 4, p. 299-329.

Taverne, N.J.M. (1923)- Vulcanologische berichten XXI-XXIX. Natuurkundig Tijdschrift voor Nederlandsch-Indie 83, p. 17-54.
(online at: https://resolver.kb.nl/resolve?urn=MMTEY01:179526004:pdf)
('Volcanological reports 21-29'. Status reviews of volcanic activity in 1922 of: XXI. G. Merapi (several eruptions), XXIII. G. Lamongan, (minor activity), XXIII. G. Semeroe, XXIV. G. Kelud (tunneling in progress), XXV. Kawah Idjen, XXVI. G. Raung (rel. quiet after 1921 eruption), XXVII. G. Awu (Sangi; active), XXVIII. G. Api (Siaoe, Sangi Archipelago; increased activity), XXIX. Miscellaneous, with report on photographing a series of Java volcano craters by Lieutenant Feenstra of LA-KNIL. With illustrations)

Taverne, N.J.M. (1924)- De drooglegging van het Keloetmeer. De Ingenieur 39, 11, p. 796-807.
(online at: https://resolver.kb.nl/resolve?urn=dts:2972058:mpeg21:pdf)
('The draining of the Kelud lake'. Discussion about the tunnels construction at the Kelud volcano (a reponse to a paper by Kemmerling (1924) in this journal and to discussion by Wing Easton (1923?) on details of the disastrous 1919 eruption))

Taverne, N.J.M. (1924)- Vulkanologische berichten XXX-XLI. Natuurkundig Tijdschrift voor Nederlandsch-Indie 84, p. 16-86.
(online at: www.delpher.nl/nl/tijdschriften/) (https://resolver.kb.nl/resolve?urn=MMTEY01:179527002:pdf)
('Volcanological reports 30-41'. Status reviews of 1923 acivity in Indonesia: XXX. G. Merapi (C Java; rel. quiet), XXXI. G. Lamongan (minor activity), XXXII. G. Semeru (no increased activity), XXXIII. Papandayan (minor increase in solfataric activity), XXXIV. Kawah Idjen (some increase in solfataric activity), XXXV. G. Raung (minor activity), XXXVI. Kelud (rel. calm; sampling of fractured andesites in tunnel before its collapse), XXXVII. G. Slamat (minor activity), XXXVIII. Kawah Cibeureum, XXXIX. G. Soputan (N Sulawesi; eruption November 1923), XL. G. Gedeh, XLI. Miscellaneous). With many illustrations)

Taverne, N.J.M. (1925)- Vulkanologische berichten XLII-LII. Natuurkundig Tijdschrift voor Nederlandsch-Indie 85, p. 101-205.
(online at: www.delpher.nl/nl/tijdschriften..) (https://resolver.kb.nl/resolve?urn=MMTEY01:179527004:pdf)
('Volcanological reports 42-53'. July 1925 report of volcanic activities in 1924 and early 1925. XLI. G. Papandajan (extensive report of monitoring through 1924), XLII. G. Merapi (C Java) (regular monitoring by Petroeschevsky et al.; installation of Omori seismometer at observation post Maron, brief increased activity in mid-Sept. 1924), XLIV. G. Lamongan (relatively quiet), XLV. Kawah Idjen (quiet), XLVI. G. Raoeng (minor activity), XLVII. G. Semeroe and Bromo (quiet), XLVIII. G. Keloet) (quiet; ongoing tunnel construction), XLIX. Tangkuban Perahu (rel. quiet; with history review), L. G. Sendoro, LI. Sopoetan (still active since eruption of November 1923)

Taverne, N.J.M. (1925)- Merkwaardige uitbarstingen van den Papandajan. Verhandelingen Geologisch-Mijnbouwkundig Genootschap Nederland Kolonien, Geologische Serie 8 (Memorial volume Gedenkboek Verbeek 80-year birthday, p. 481-519.
(book online at: www.delpher.nl/nl/boeken/ Etc.)
(also online at: https://resolver.kb.nl/resolve?urn=MMKB24:062597000:pdf)
('Peculiar eruptions of the Papandayan'. Last known eruption of Papandayan was in 1772, which killed ~3000 people, but not clear how this happened (Taverne suspects large pyroclastic flow(s)). In March 1923- early 1925 18 relatively insignificant eruptions in western part of crater, followed by fumarole activity, etc.)

Taverne, N.J.M. (1925)- De aardbevingen van Wonosobo op 12 November en 2 December 1924. Vulkanologische Mededeelingen (Dienst Mijnwezen Nederlandsch Oost Indie) 8, Landsdrukkerij, Weltevreden, p. 1-21.
('The earthquakes of Wonosobo on 12 November and 2 December 1924'. Non-volcanic earthquakes on Dieng Plateau in E Java. With 18 photos)

Taverne, N.J.M. (1926)- Omzetting van vulkanische in electrische energie. De Mijningenieur 6, 1925, p.
('Conversion of volcanic into electrical energy'. Early paper on geothermal energy, with list of potential sites on Java)

Taverne, N.J.M. (1926)- Vulkaanstudieen op Java. Doctorate Thesis, Technische Hogeschool Delft, p. 1-132.
(online at: https://repository.tudelft.nl/islandora/object/uuid%3Ad5284b83-38b6-439e-934f-83a406add41a?collection=research)
('Volcano studies on Java'. TH Delft Thesis under Prof. H.A. Brouwer. Classic study of Java volcanoes, based mainly on Taverne's land investigations in 1922-1924, and the newly acquired, spectacular aerial photos made from Netherland Indies Army flyovers between August 1922 and May 1924. Three types on Java: (1) volcano ruins (2 examples), monoconic volcanoes (9 examples) and polyconic volcanoes (7 ex.))

Taverne, N.J.M. (1926)- Vulkaanstudieen op Java. Vulkanologische Mededeelingen (Dienst Mijnwezen Nederlandsch Oost Indie) 7, p. 1-132.
(online at: https://books.google.com/books?id=33G4i0TFOMUC&printsec=frontcover&source Etc.)
(online at: https://www.delpher.nl/ etc. and https://resolver.kb.nl/resolve?urn=MMKB21:031658000:pdf)
(Same as Taverne (1926), above)

Thoha, M., P. Parman, B. Prastistho, D.F. Yudiantoro, I. Permata Hati & I.B. Jagranata (2014)- Geology and geothermal manifestations of Mount Pandan, East Java, Proc. 3rd International ITB Geothermal Workshop, Bandung 2014, p. 1-13.
(online at: http://eprints.upnyk.ac.id/14608/1/4.%20Maret%202014%20CD%20GEOLOGY%20AND% Etc.)
(Mt. Pandan is inactive E Pleistocene volcano in Kendeng zone of E Java, with several eruption centers and geothermal manifestations)

Thornton, I.W.B. (1997)- Krakatau: the destruction and reassembly of an island ecosystem. Harvard University Press, p. 1-346.
(Review of repopulation of a tropical forest ecosystem on Krakatau islands since 1883 eruption. Now covered in secondary forest with >200 species of plants, 70 species of vertebrates, and 1000's of invertebrate species)

Thouret, J.C., K.E. Abdurachman, J.L. Bourdier & S. Bronto (2000)- Origin, characteristics, and behaviour of lahars following the 1990 eruption of Kelud volcano, eastern Java (Indonesia). Bulletin of Volcanology 59, p. 460-480.
(online at: https://www.academia.edu/127090272/Origin_characteristics_and_behaviour_of_lahars_following_the_1990_eruption_of_Kelud_volcano_eastern_Java_Indonesia_)
(Kelud one of the most lahar-prone volcanoes of Java. In contrast to most 20th-century eruptions of Kelud volcano, plinian eruption of 10 February 1990 not accompanied by lake-outburst lahars. However, at least 33

post-eruption lahars followed in following 7 weeks, travelling as far as 24 km. Deposits ~7 m thick at 2 km from vent, 3 m thick at 10 km from vent)

Thouret, J.C., F. Lavigne, K. Kelfoun & S. Bronto (2000)- Toward a revised hazard assessment at Merapi volcano, Central Java. J. Volcanology Geothermal Research 100, p. 479-502.
(online at: www.academia.edu/5508657/Toward_a_revised_hazard_assessment_at_Merapi_volcano_Central_Java)
(Of the 1.1 million people living on flanks Merapi volcano, 440,000 are at relatively high risk in areas prone to pyroclastic flows, surges, and lahars)

Thouret, J.C., F. Lavigne, H. Suwa, B. Sukatja & B. Surono (2007)- Volcanic hazards at Mount Semeru, East Java (Indonesia), with emphasis on lahars. Bulletin of Volcanology 70, 2, p. 221-244.
(Mt. Semeru highest mountain in Java (3,676 m), is one of few persistently active composite volcanoes on Earth. Daily eruptive activity supplies pyroclastic debris shed over summit cone). Adjacent to plain with about 1 million people. Two edifices: Mahameru 'old' Semeru and Seloko 'young' Semeru. Pyroclastic flows recur every 5 years on average; large lahars (>5 Mm^3 each) at least five times since 1884. Lumajang, home to 85,000 people, 35 km E of summit, was devastated by lahars in 1909)

Thouret, J.C., J.F. Oehler, A. Gupta, A. Solikhin & J. Procter (2014)- Erosion and aggradation on persistently active volcanoes- a case study from Semeru Volcano, Indonesia. Bulletin of Volcanology 76, 10, p. 1-26.
(Semeru volcano, E Java, is one of the most magmatically active volcanoes on Earth that also produces huge volumes of lahars. Patterns of aggradation (sediment supply pulses from episodic pyroclastic density currents and continuous supplies of tephra) and degradation via cycles of aggradation and degradation in river channels and rain-triggered (which remove much more material than fluvial transport))

Thouret, J.C., M. Taillandier, E. Wavelet, N. Azzaoui, O. Santoni & B. Tjahjono (2023)- Semeru volcano, Indonesia: measuring hazard, exposure and response of densely populated neighbourhoods facing persistent volcanic threats. Natural Hazards 117, p. 1405-1453.

Tissot van Patot, A. (1926)- De bouw van het Wilis gebergte. Jaarboek Topographische Dienst, Batavia, 1925, p. 1-10.
('The composition of the Wilis mountains'. Quaternary volcanic complex in East Java. TvP suggests three episodes of Quaternary volcanic activity)

Tjia, H.D. (1962)- Aerial observation of Gunung Merapi Central Djava. Proceedings Institut Teknologi Bandung (ITB) 1, 4, p. 1-7.
(online at: https://journals.itb.ac.id/index.php/jmfs/article/view/9812)
(Aerial reconnaissance of Merapi volcano with military plane in November 1961, after 1400m long lava flow to SW in May 1961. Two breaks in slope on Merapi: at ~1500m contour (base of 36°- 42° upper slope) and at 400m contour line (base of 9°- 12° middle slope composed of lahars and used for 'ladangs'/dry fields). Below 400m alluvial plain of gentle gradient (<1°) and is used for 'sawahs'/ wet fields)

Tjia, H.D. (1969)- Fracture pattern on Lamongan volcano, East Java. Bulletin of Volcanology 33, 2, p. 594-599.
(Arial photographs show fractures up to 3 km long on slopes and in country surrounding Lamongan volcano in E Java, Indonesia. Also linear arrangements of maars and boccas. Fracture system is compatible with regional compression directed N15°- 195°E)

Troll, V.R., F.M. Deegan, E.M. Jolis, C. Harris, J.P. Chadwick, R. Gertisser, L.M. Schwarzkopf, A.Y Borisova et al. (2013)- Magmatic differentiation processes at Merapi Volcano: inclusion petrology and oxygen isotopes. J. Volcanology Geothermal Research 261, p. 38-49.
(online at: www.academia.edu/30455512/Magmatic_differentiation_processes_at_Merapi_Volcano_inclusion_petrology_and_oxygen_isotopes)

(Common calc-silicate inclusions and elevated δ18O values in feldspar phenocrysts from 1994-2010 Merapi lavas suggest addition of limestone and calc-silicate materials to Merapi magmas. Together with high δ13C in fumarole gas, crustal additions to mantle and slab-derived magma and volatiles likely steady state process)

Troll, V.R., D.R. Hilton, E.M. Jolis, J.P. Chadwick, L.S. Blythe, F.M. Deegan, L.M. Schwarzkopf & M. Zimmer (2012)- Crustal CO_2 liberation during the 2006 eruption and earthquake events at Merapi volcano, Indonesia. Geophysical Research Letters 39, L11302, p. 1-6.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2012GL051307)

Umbgrove, J.H.F. (1928)- The first days of the new submarine volcano near Krakatoa. Leidsche Geologische Mededelingen 2, p. 325-328.
(online at: https://repository.naturalis.nl/pub/505661/LGM1926002001014.pdf)
(Pictures of Anak Krakatoa on 3-4 January 1928, taken during a trip with government steamer 'Wega', with Dr. C. Stehn and F. Ecoma Verstege of the Volcanology Department in Bandung. The new volcano island was 'born' in late December 1927 within the large Krakatau caldera formed by catastrophic 1883 eruption)

Urlaub, M., J. Belo, C. Berndt, E. Klein, J. Wollschläger, A.M. Volsch (2023)- Reconstructing volcanic eruptions and tsunamis of Krakatau Volcano - Transit. SONNE-Berichte, Cruise SO299, Leg 2, Singapore-Port Louis, 15/08- 02/09/2023, p. 1-39.
(online at: https://www.geomar.de/fileadmin/personal/fb4/gdy/cberndt/SO299_2_Cruise_Report_04.pdf)
(Prelimininary cruise report of German Research Vessel SONNE in 2023, with main scientific focus on Krakatau archipelago in the Sunda Strait)

Van Baren, J. (1931)- Properties and constitution of a volcanic soil, buit in 50 years in the East-Indian Archipelago. Mededeelingen Landbouw-Hoogeschool, Wageningen 35, Verhandelingen 6, p. 1-33.
(online at: https://core.ac.uk/download/pdf/186483351.pdf)
(A soil profile sampled in 1928 by F. Ecoma Verstege on Lang Eiland (Krakatau) shows 50 years of tropical weathering of pumice since the 1883 eruption, 0,45% humus formed; $Si0_2$, Na_20 and K_20 decreased and $A1_20_3$ and Fe_20_3 increased)

Van Baren, F.A. (1948)- On the petrology of the volcanic area of the Goenoeng Moeria (Java). Mededelingen Algemeen Proefstation voor de Landbouw, Buitenzorg (Bogor), 60, p. 1-69.
(online at: https://edepot.wur.nl/216992)
(Petrographic descriptions of volcanic rocks of Muria volcano, incl. leucite bearing series: (a) monzonite-latite series, (b) tephrite-leucitite series, (c) leucite-basanite series, (d) augitite-limburgite series and (e) shoshonitic-absarokite-trachyte series. Originally written in 1942)

Van Bemmelen, R.W. (1930)- De Tengger-strijdvraag. Natuurkundig Tijdschrift voor Nederlandsch-Indie 90, p. 96-161.
(online at: https://resolver.kb.nl/resolve?urn=MMTEY01:179529006:pdf)
('The Tengger debate'. Description of evolution of the Tengger-Bromo caldera/ volcanic complex in East Java, discussing previous interpretations by Verbeek & Fennema (1896), Escher (1927), Akkersdijk (1928) and Van den Bosch (1929))

Van Bemmelen, R.W. (1937)- The volcano-tectonic structure of the Residency of Malang (Eastern Java) (an interpretation of the structure of the Tengger Mountains). De Ingenieur in Nederlandsch-Indie (IV), 4, 9, p. 159-172.
(Discussion of E Java between Madura Straits and Indian Ocean and Arjuna, Semeru- Bromo- Tengger and Lamongan volcanic complexes)

Van Bemmelen, R.W. (1938)- De Ringgit-Beser, een geplooide alkali-vulkaan in Oost-Java. Natuurkundig Tijdschrift voor Nederlandsch-Indie 98, p. 171-194.

('The Ringgit-Beser, a folded alkali-volcano in East Java'. Ringgit-Beser volcanic complex originated in shallow sea at N coast of E Java during Plio-Pleistocene. Volcano grew above sea level, became connected with mainland, and was subjected to folding in younger Pleistocene (Beser Ridge anticline))

Van Bemmelen, R.W. (1938)- Het Ringgit-Besergebergte (een geplooide alkalivulkaan in Oost-Java). Handelingen 8e Nederlandsch-Indisch Natuurwetenschappelijk Congres, Soerabaia, July 1938, p. 495-496.
(online at: https://resolver.kb.nl/resolve?urn=MMKB31:042287000:pdf)
('The Ringgit- Beser mountains (a folded alkaline volcano in East Java)'. Brief version of 1938 paper above)

Van Bemmelen, R.W. (1941)- Voorloopig bericht over de Semeroe-eruptie van September-Oktober 1941. Nederlandsch-Indische Geografische Mededeelingen 1, p. 136-142.
('Preliminary communication about the Semeru eruption of September-October 1941'. In short-lived journal 'Netherlands Indies Geographic Communications')

Van der Zwan, F.M, J.P. Chadwick & V.R. Troll (2013)- Textural history of recent basaltic-andesites and plutonic inclusions from Merapi volcano. Contributions to Mineralogy and Petrology 166, p. 43-63.
(online at: https://www.academia.edu/3707451/Textural_history_of_recent_basaltic_andesites_and_plutonic_inclusions_from_Merapi_volcano)
(On Recent Merapi basaltic andesites crystal size distribution, coarse plutonic inclusions, etc.)

Van Es, L.J.C. & N.J.M. Taverne (1924)- De Galoenggoeng en Telaga Bodas. Vulkanologische Mededeelingen (Dienst Mijnbouw Nederlandsch-Indie), Bandung, 6, p. 1-63.
(online at: https://www.delpher.nl/nl/boeken/view?identifier=MMKB24:076864000:00001)
('The Galunggung and Telaga Bodas'. Description of Galunggung- Telaga Bodas volcano group in West-Central Java by Taverne, and report of Galunggung eruptions of July 1918, 1822 and 1894 by Van Es)

Van Gelder, J.K. & M.H. Caron (1915)- Den zwavelafzettingen in den Kawah Idjen. Jaarboek Mijnwezen Nederlandsch Indie, Verhandelingen 2, p. 70–90.
('The sulfur deposits in the Ijen crater', East Java)

Van Gerven, M. (1990)- Vulkanologisch-petrographische und geochemische Untersuchungen im Bereich der Tengger-Caldera, Java, Indonesien. M.Sc. Thesis, University of Tiibingen, p. 1-101. *(Unpublished)*
('Volcanological-petrographic and geochemical investigations in the area of the Tengger Caldera, Java, Indonesia')

Van Gerven, M. & H. Pichler (1995)- Some aspects of the volcanology and geochemistry of the Tengger caldera, Java, Indonesia: eruption of a K-rich tholeiitic series. J. Southeast Asian Earth Sciences 11, 2, p. 125-133.
(Tengger Caldera volcanics medium to high-K tholeiitic andesites and basaltic andesites)

Van Gogh, F.A.A. (1913)- De Semeroe-uitbarsting van 15 November 1911. Tijdschrift Koninklijk Nederlands Aardrijkskundig Genootschap (II), 30, p. 744-756.
(online at: https://resolver.kb.nl/resolve?urn=MMUBA13:001659001:pdf)
('The Semeru eruption of 15 November 1911'. Significant ash eruption, but no loss of human life. Van Gogh climbed Semeru in 4 days, accompanied by Swiss geologist Dr. Arnold Heim. Both reached top on 14 November, the day before bigger-than-normal eruption)

Van Hinsberg, V.J., K. Berlo, D.L. Pinti & B. Ghaleb (2021)- Gypsum precipitating from volcanic effluent as an archive of volcanic activity. Frontiers in Earth Science 9, 764087, p. 1-21.
(online at: https://www.frontiersin.org/articles/10.3389/feart.2021.764087/full)
(Growth-zoned gypsum viewed as mineral archive of activity of Kawah Ijen volcano in E-Java)

Van Rummelen, F.F.F.E. & Raden R. Hardjosoesastro (1952)- The mineralogical background of the ash distribution of the Gunung Kelud in connection with the geomorphology of Java (Indonesia). J. Scientific Research 11, 8-9, p. 178-183.
(Distributions and composition of ash from 1901, 1919 and 1951 eruptions of Kelud volcano, E Java)

Van Sandick, R.A. (1890)- In het rijk van Volcaan. De uitbarsting van Krakatau en hare gevolgen. W.J. Thieme, Zutphen, p. 1-195.
(Transcription online at: http://www.vansandick.com/familie/archief/In_het_Rijk_van_Vulcaan/)
('In the realm of Vulcaan; the eruption of Krakatau and its consequences'. Early popular review of Krakatau 1883 eruption and the aftermath, by eyewitness of eruption from the ship G.G. Loudon in Sunda Straits)

Verbeek, R.D.M. (1884)- Rapport over een onderzoek van den vulkaan Merapi. Landsdrukkerij, Batavia, 4 p.
(online at: https://digitalcollections.universiteitleiden.nl/view/item/3883153)
(Report on an investigation of the Merapi volcano'. Brief report on trip to crater of Merapi from Sele in December 1883, investigating dome of loose blocks of augite andesite within crater (several of these domes of blocks within Merapi crater came and went during last decades))

Verbeek, R.D.M. (1884)- Over de tijdsbepaling der grootste explosie van Krakatau op 27 Augustus, 1883. Verslagen Koninklijke Akademie van Wetenschappen, Amsterdam, ser. 3, 1, p. 45-57.
('On the determination of timing of the largest eruption of Krakatau on 27 August, 1883'. Increase in eruptive activity on August 26, maximum eruption at 10 am of August 27, smaller eruptions until 6 am on August 28)

Verbeek, R.D.M. (1884)- The time determination of the biggest explosion of Krakatoa on August 28, 1883. Science 3, 1884, p. 43-55.
(English version of Verbeek (1884), above)

Verbeek, R.D.M. (1885-1886)- Krakatau. Landsdrukkerij (Government Printing Office), Batavia, Vol. 1 (p. 1-104) and 2 (p. 105-567), Part 2 Atlas with 43 maps, 25 plates.
(Dutch text online at: https://books.google.com/books/about/Krakatau.html?id=j5Q0AQAAMAAJ)
(French text volume online at: https://gallica.bnf.fr/ark:/12148/bd6t5371511t)
(Verbeek's famous, extensive report on the 1883 cataclysmic eruption of Krakatoa volcano in Sunda Straits and its effects (incl. human casualties, tuffs and tsunami deposits, etc.)))

Verbeek, R.D.M. (1925)- De vulkanische erupties in Oost-Java in het laatst der 16de eeuw. Verhandelingen Geologisch-Mijnbouwkundig Genootschap Nederland Kolonien, Geologische Serie 7, 3, p. 149-200.
(online at: https://www.delpher.nl/nl/boeken/view?identifier=MMKB02:000122328:00005)
('The volcanic eruptions in East Java at the end of the 16th century'. Observations from historic ship records, etc.)

Vigouroux-Caillibot, N. (2011)- Tracking the evolution of magmatic volatiles from the mantle to the atmosphere using integrative geochemical and geophysical methods. Ph.D. Thesis Simon Fraser University, Burnaby, p. 1-254.
(online at: www.sfu.ca/volcanology/pdfs/Vigouroux_PhD'11.pdf)
(Includes work on volatiles from Kawah Ijen, E Java, and Tambora, Sumbawa)

Vigouroux, N., P.J. Wallace, G. Williams-Jones, K. Kelley, A.J.R. Kent & A.E. Williams-Jones (2012)- The sources of volatile and fluid-mobile elements in the Sunda arc: a melt inclusion study from Kawah Ijen and Tambora volcanoes, Indonesia. Geochem. Geophysics Geosystems 13, 9, Q09015, p. 1-22.
(online at: http://onlinelibrary.wiley.com/doi/10.1029/2012GC004192/epdf)
(Indonesian volcanoes variable concentrations of volatile and fluid-mobile elements. Kawah Ijen higher Altered Oceanic Crust-derived fluid fluxes (Sr/Nd and H2O/Nd) than Galunggung and Tambora)

Vissering, G. (1910)- Geweldige natuurkrachten. Landsdrukkerij, Batavia, p. 1-91.
(online at: https://resolver.kb.nl/resolve?urn=MMKB18:001000000:pdf)

('Tremendous forces of nature'. Popular book on volcanoes in Indonesia, especially Kelut and Semeru in East Java, by the president of the Java Bank)

Voight, B., E.K. Constantine, S. Siswowidjoyo & R. Torley (2000)- Historical eruptions of Merapi volcano, Central Java, Indonesia, 1768-1998. J. Volcanology Geothermal Research 100, p. 69-138.
(online at: https://www.researchgate.net/publication/248256692_Historical_eruptions_of_Merapi_Volcano_Central_Java_Indonesia_1768-1998)
(Extensive chronology of Merapi volcano, C Java. Major difference in eruption style between 20st and 19th centuries: in 20th century mainly growth of viscous lava domes and lava tongues, with occasional gravitational collapses of parts of oversteepened domes to produce nuees ardentes; in 1800s rel. large explosive eruptions with large 'fountain-collapse' nuees ardentes)

Voight, B. & M.J. Davis (2000)- Emplacement temperatures of the November 22, 1994 nuee ardente deposits, Merapi Volcano, Java. J. Volcanology Geothermal Research 100, p. 371-377.
(online at: www.researchgate.net/profile/B-Voight/publication/238366924_Emplacement_temperatur Etc.)
(Emplacement temperatures of parts of 22 november 1994 channeled inhomogeneously-hot 'nuee ardente' block-and-ash flow deposits at SW flank of Merapi were ~550°C)

Voight, B., K.D. Young, D. Hidayat, Subandrio, M.A. Purbawinata, A. Ratdomopurbo, Suharna, Panut. D.S Sayudi et al. (2000)- Deformation and seismic precursors to dome-collapse and fountain-collapse nuees ardentes at Merapi Volcano, Java, Indonesia, 1994-1998. J. Volcanology Geothermal Research 100, p. 261-287.
(online at: www.academia.edu/13088152/Deformation_and_seismic_precursors_to_dome_collapse Etc.)
(Following Merapi eruption of January 1992, episodes of lava dome growth followed by dome-collapse nuees ardentes occurred in 1994-1998. Nuees ardentes alsogenerated by fountain-collapse in January 1997. Etc.)

Volz, W. (1904)- Lavarinnen am Vulcan Guntur in West-Java. Neues Jahrbuch Mineralogie Geologie Palaontologie, 1904, 2, p. 114-117.
('Lava flows on the Guntur volcano, West Java')

Volz, W. (1904)- Der Vulcan Papandajan in West-Java. Neues Jahrbuch Mineralogie Geologie Palaontologie, Beilage Band XX, p. 122-132.
('The Papandayan volcano in West Java')

Vukadinovic, D. (1995)- High-field-strength elements in Javanese arc basalts and chemical layering in the mantle wedge. Mineralogy and Petrology 55, 4, p. 293-308.
(Quaternary basalts from Java-Bali sector of Sunda Arc show increase in high-field-strength elements (Nb, Zr, Hf) and decrease in Zr/Nb and Hf/Nb with increase of depth to Benioff zone, consistent with progressively enriched mantle wedge with depth)

Vukadinovic, D. & I.A. Nicholls (1989)- The petrogenesis of island arc basalts from Gunung Slamet volcano, Indonesia: trace elements and 87Sr/ 86Sr constraints. Geochimica Cosmochimica Acta 53, 9, p. 2349-2363.
(Study of major and trace elements, rare earth element (REE) and 87Sr/86Sr data of arc basalts from Gunung Slamet volcano, Java)

Vukadinovic, D. & I. Sutawidjaja (1995)- Geology, mineralogy and magma evolution of Gunung Slamet volcano, Java, Indonesia. J. Southeast Asian Earth Sciences 11, 2, p. 135-164.
(Slamet two large overlapping Quaternary stratocones. Basaltic andesites and andesites with rare basalts dominate in W (Slamet Tua), basalts and basaltic andesites compose East cone (Slamet Muda))

Walter, T.R., M.H. Haghighi, F.M. Schneider, D. Coppola, M. Motagh, J. Saul et al. (2019)- Complex hazard cascade culminating in the Anak Krakatau sector collapse. Nature Communications 10, 4339, p. 1-10.
(online at: https://www.nature.com/articles/s41467-019-12284-5.pdf)
(On 22 Dec 2018 collapse event at Anak Krakatau in Sunda Strait, triggering tsunami that killed 430. Prior to collapse, elevated state of activity. Collapse of volcano's flank two minutes after small earthquake)

Walter, T. R., A. Ratdomopurbo, Subandriyo, A. Nurnaning, K. Brotopuspito, J.T. Salzer & B.G. Luhr (2013)-: Dome growth and coulee spreading controlled by surface morphology, as determined by pixel offsets in photographs of the 2006 Merapi eruption. J. Volcanology Geothermal Research 261, p. 121-129.
(preprint online at: https://gfzpublic.gfz-potsdam.de/rest/items/item_247330_2/component/file_396192/content)

Westerveid, J. (1951)- Vergeten berichten over Krakatau. Tijdschrift Koninklijk Nederlands Aardrijkskundig Genootschap 68, p. 129-131.
('Forgotten reports on Krakatau')

White, J.D. (1919)- Bodemonderzoek op Java en Sumatra: resultaten eener geologische en agrogeologische reis in 1916: 3. Petrografische beschrijving van eenige gesteenten van den Salak. Mededeelingen Landbouw-Hoogeschool Wageningen 16, p. 89-94.
(online at: https://edepot.wur.nl/296365)
('Soil investigations on Java and Sumatra: results of a geological and agrogeological journey in 1916: 3. Petrographic description of rocks of the Salak'(volcano), NW of Bogor, incl. hyperstene andesite, augite andesite, hornblende andesite)

Whitley, S., R. Gertisser, R. Halama, K. Reece, V. Troll & F.M. Deegan (2019)- Crustal CO_2 contribution to subduction zone degassing recorded through calc-silicate xenoliths in arc lavas. Nature Scientific Reports 9, 1, 8803, p. 1-11.
(online at: https://www.nature.com/articles/s41598-019-44929-2)
(Interaction between magma and crustal carbonate studied in calc-silicate xenoliths from 1994-2010 lava domes of active Merapi volcano, C Java. Two types of xenoliths, with alteration minerals clinopyrozxene, wollastonite, etc. Rapid release of large volumes of crustal CO_2 may impact global carbon cycling. Etc.)

Whitley, S., R. Halama, R. Gertisser, K. Preece, F.M. Deegan & V.R Troll (2020)- Magmatic and metasomatic effects of magma-carbonate interaction recorded in calc-silicate xenoliths from Merapi Volcano (Indonesia). Journal of Petrology 61, 4, egaa048, p. 1-38.
(online at: https://www.academia.edu/69348214/Magmatic_and_metasomatic_effects_of_magma_carbonate_interaction_recorded_in_calc_silicate_xenoliths_from_Merapi_volcano_Indonesia_)
(Abundant calc-silicate skarn xenoliths at Merapi volcano reflects interaction of basaktic and andesitic magma-with underlying upper crust of carbonate-rich Cretaceous-Cenozoic sediments. Two xenolith types:(1) magmatic skarn xenoliths, with evidence of formation within magma; and (2) exoskarn xenoliths holocrystalline, unzoned, with rim of clinopyrozene at lava contact, likely representing fragments of metamorphosed (carbonate) wall rocks. Magma-carbonate interaction associated with partial carbonate melting, decarbonation, etc. Associated CO_2 release could affect eruption intensity)

Wibowo, H.E. (2017)- Petrological and geochemical study of Sundoro Volcano, Central Java, Indonesia: temporal variations in differentiation and source processes in the growth of an individual volcano. Ph.D. Thesis Graduate School of Science, Hokkaido University, p. 1-275.
(online at: https://eprints.lib.hokudai.ac.jp/dspace/bitstream/2115/65414/1/Haryo_Edi_Wibowo.pdf)
(Geochemistry of 9 units of volcanic products of Sundoro of past 34 ka. Three magma types, formed by continuous slab dehydration and partial melting, from three distinct slab-derived fluxes. Ratios of slab hydrous fluid and sediment melt in Flux-A is 50:50, Flux-B is 45:55 and Flux-C is 40:60. The "unusual" magmatism of C Java arc may reflect influence of subduction of rugged bathymetry relief beneath region)

Wibowo, H.E., S.M. Cahyani, M.L.A. Moktikanana, S.H.P. Sari & A. Harijoko, (2023)- Volume estimation of the thickest scoriaceous tephra-fall deposits on the South-Southeastern flank of Mt. Raung. J. Applied Geology (UGM) 8, 2, p. 91-97.
(online at: https://jurnal.ugm.ac.id/jag/article/view/80866/38881)
(Thick scoriaceous tephra-fall deposits at S-SE flank of Mt. Raung,E Java, indicating large rel. young past explosive eruptions. Four main layers, but probably all from single eruption cycle. Volume of Scoria Fall 2 ~0.54 km3, and Scoria Fall 3 is ~0.26 km3, making total volume 0.8 km3 (VEI 4))

Wibowo, H.E., M. Nakagawa, T. Kuritani, R. Furukawa, O. Prambada & A. Harijoko (2022)- Petrological and geochemical study of Sundoro Volcano, Central Java, Indonesia: temporal variations in differentiation and source processes during the growth of an individual volcano. Journal of Petrology 63, 9, egac083, p. 1-22.
(online at: https://academic.oup.com/petrology/article/63/9/egac083/6671136)
(Isotope ratios and geochemical data from rocks of Sundoro volcano in C Java that represent volcano's activity since 34 ka. Three magma types A, B and C, representing mixing of mafic and felsic end-members, with increasing sediments and slab-derived flux)

Wichmann, A. (1896)- Der angebliche Schlammausbruch des Gunung Salak im Jahre 1699. Neues Jahrbuch Mineralogie Geologie Palaeontologie 1896, 2, p. 1-26.
(online at: https://www.zobodat.at/pdf/Neues-Jb-Min-Geol-Palae_1896_2_0001-0026.pdf)
('The alleged mud eruption of Gunung Salak in 1699'. Discussion of reports of earthquake in Batavia on 5 January 1699, followed by mud-rich flows of Ciliwung and Cisadane Rivers suggesting Salak volcano near Buitenzorg (Bogor) might have erupted. Junghuhn (1838) postulated it was associated with crater collapse. Wichmann doubts that significant eruption took place at this date))

Wichmann, A. (1900)- Der Ausbruch des Gunung Ringgit auf Java im Jahre 1593. Zeitschrift Deutschen Geologischen Gesellschaft, Berlin, 52, 4, p. 640-660.
(online at: https://www.biodiversitylibrary.org/item/148377#page/782/mode/1up)
('The eruption of Mt. Ringgit on Java in the year 1593'. Historic records of significant volcanic activity of Ringgit volcano above Panarukan village, with possibly 10,000 people killed)

Widiyantoro, S., M. Ramdhan, J.P. Metaxian, P.R. Cummins, C. Martel, S. Erdmann, A.D. Nugraha, A. Budi-Santoso, A. Laurin & A.A. Fahmi (2018)- Seismic imaging and petrology explain highly explosive eruptions of Merapi Volcano, Indonesia. Nature Scientific Reports 8, 13656, p. 1-7.
(online at: https://www.nature.com/articles/s41598-018-31293-w.pdf)
(Seismic tomographic images show details of subvertical magma plumbing system of Merapi Volcano. P- and S-wave data with similar path coverage reveal high Vp/Vs structure from depth of ≥20km below (MSL to summit of volcano. Combined with petrological studies suggest (1) shallow zone of intense fuid percolation, directly below summit of the volcano; (2) main magma reservoir at ≥10- 20km below MSL that is orders of magnitude larger than erupted magma volumes; (3) deep magma reservoir at MOHO depth which supplies main reservoir; (4) extensive, subvertical fuid-magma-transfer zone from mantle to surface)

Williams, R., P. Rowley & M.C. Garthwaite (2019)- Reconstructing the Anak Krakatau flank collapse that caused the December 2018 Indonesian tsunami. Geology (GSA) 47, 10, p. 973-976.
(22 December 2018 flank failure of Anak Krakatau volcano generated tsunami that killed >400 people. Volume of material initially lost from volcano flank failure relatively small (~0.1 km^3) compared to overall changes observed during entire eruption. Flank failure changed eruption style and upper volcanic plumbing system, with subsequent explosive eruptions destroying summit, then partially rebuilding lost flank)

Willumsen, P. (1997)- Krakatau, events and geology, a practical guide to Krakatau and surroundings. Indonesian Petroleum Association (IPA), Jakarta, 1-73.
(Fieldtrip guidebook with brief introduction to Krakatau volcano, Sunda Straits, and its infamous eruption of 1883)

Winanto, E., A.N. Abrory, E. Edwin & M. Abdurrachman (2022)- Geochemistry of Gede Volcanic Complex West Java, Indonesia, compared to Salak Volcano as its proximity and how the Ciletuh Melange Complex lineament affected it. Proc. 1st Int. Seminar on Earth Sciences and Technology (ISEST 2021), Bandung, IOP Conference Series: Earth and Environmental Science 1047, 012013, p. 1-18.
(online at: https://iopscience.iop.org/article/10.1088/1755-1315/1047/1/012013/pdf)
(Quaternary arc volcanics of W Java Gede Volcanic Complex and Salak volcano show similarities to basalt in Ciletuh)

Winchester, S. (2003)- Krakatoa: the day the world exploded, 27 August 1883. Harper Collins Publishers, New York, p. 1-416.
(Popular but thorough account of the 1883 eruption of Krakatoa volcano in Sunda Strait that killed nearly 40,000 people and its impact)

Wirakusumah, A.D. (1982)- Perbukitan sepuluh ribu di Tasikmalaya. Berita Geologi 14, 23, p. 211-213.
('The ten thousand hills of Tasikmalaya'. Debris field after flank collapse of Galunggung volcano (see also Escher 1925, Bronto 1982))

Wirakusumah, A.D. (1991)- Some studies of the volcanology, petrology and structures of Mt. Kelut, East Java, Indonesia. Ph.D. Thesis. Victoria University, Wellington, New Zealand, p. 1-461.

Wirakusumah, A.D. (1993)- Geology of and magma mixing process at Mt. Kelut, East Java. Proc. 22nd Annual Conv. Indonesian Association Geologists (IAGI), Bandung, 1, p. 25-34.
(online at: https://www.iagi.or.id/web/digital/61/6.pdf)
(Kelud volcano complex in E Java with ten eruption craters identified on summit area and W flank. Eruption center moved clockwise from Lirang crater (oldest; ~238 ka) via Gajahmungkur, Kombang, Tumpak, Dargo, Badak, etc., to Kelut crater ~(4 ka). Volcanics dominated by basaltic andesites)

Wirakusumah, A.D., H. Juwarna & H. Loebis (1983)- The geological map of Merapi Volcano, Central Java. Volcanological Survey of Indonesia, Bandung. 1:50,000 scale map.

Xia, L. & R. Clocchiatti (1986)- Magmatic inclusions in phenocrystals from andesitic lavas, Krakatau volcano, Indonesia. Chinese J. Geochemistry 5, 4, p. 331-346.

Xiang, J. S. Guo, X. Shi, D. Yu, G. Wei, N. Wen, C. Chen & K. Dai (2022)- Revealing the morphological evolution of Krakatau volcano by integrating SAR and optical remote sensing images. Remote Sensing (MDPI) 14, 6, 1399, p. 1-11.
(online at: https://www.mdpi.com/2072-4292/14/6/1399)
(Changes in area of Anak Krakatau volcano in 2018-2019, before and after the 22 December 2018 major lateral collapse of W part, following an undersea landslide, using Sentinel-1 and ALOS-2 Synthetic aperture radar (SAR) images.. SE part of the volcano expanded significantly after the eruption. Volcano morphology change experienced a slow-fast-slow process in two years)

Yokoyama, I. (1981)- A geophysical interpretation of the 1883 Krakatau eruption. J. Volcanology Geothermal Research 9, p. 359-378.
(Discussion of 1883 eruption of Krakatau from geophysical standpoint)

Yokoyama, I. (1987)- A scenario of the 1883 Krakatau tsunami. J. Volcanology Geothermal Research 34, p. 123-132.

Yokoyama, I. (2014)- Krakatau caldera deposits: revisited and verification by geophysical means. Annals of Geophysics 57, 5, S0541, p. 1-11.
(online at: www.annalsofgeophysics.eu/index.php/annals/article/view/6404/6384)

Yokoyama, I. (2015)- Eruption products of the 1883 eruption of Krakatau and their final settlement. Annals of Geophysics 58, 2, S0220, p. 1-13.
(online at: www.annalsofgeophysics.eu/index.php/annals/article/view/6529/6509)
(Verbeek (1886) estimate of 12 km^3 volume of Krakatau 1883 eruption ejecta revised to 19 km^3, much more than volume of disrupted volcano edifice (8 km^3). Author does not support hypothesis that calderas formed by collapses of volcano edifices into magma reservoirs)

Yokoyama, I. (2022)- The 1815 Tambora Eruption: its significance to the understanding of large explosion caldera formations. Geofísika Internacional (Mexico) 61, 1, p. 5-19.

(online at: http://revistagi.geofisica.unam.mx/index.php/RGI/article/view/11/14)
(Review paper. Tambora 1815 caldera defined as large "explosion-type" caldera, the largest in historic time (6.7km in diameter. After 1815 no further explosive eruptions, only small Doro Api Toi lava flow. Latest estimate of 1815 ejecta volume ~41-63 km^3. Pre-eruption height ~4000m)

Yokoyama, I. & D. Hadikusumo (1969)- Volcanological survey of Indonesian volcanoes, Part 3. A gravity survey on the Krakatau Islands, Indonesia. Bull. Earthquake Research Institute (Tokyo University) 47, 5, p. 991-1001.
(online at: https://repository.dl.itc.u-tokyo.ac.jp/records/33356)
(Gravity survey at Krakatau in September-October 1968. Concentric pattern of Bouguer anomalies, cenered at Anak Krakatau)

Young, K.D. (2007)- Deformation, lava dome evolution, and eruption cyclicity at Merapi Volcano, Indonesia. Ph.D. Thesis, Pennsylvania State University, p. 1-150.
(online at: https://etda.libraries.psu.edu/files/final_submissions/3370)

Young, K.D., B. Voight, Subandriyo, Sajiman, Miswanto & T.J. Casadevall (2000)- Ground deformation at Merapi Volcano, Java, Indonesia: distance changes, June 1988-October 1995. J. Volcanology Geothermal Research 100, p. 233-259.
(Edifice deformations of Merapi reported for 1988–1995. Period includes major resumption in lava effusion in January 1992 and a major dome collapse in November 1994. Study documents significant 4-year period of deformation precursory to 1992 eruption)

Yudiantoro, D.F., R.T. Perwira & M.O.B. Nugroho (2019)- The geology and Lamongan volcanic rocks case study at Ranu Pakis, Klakah, Lumajang, East Java Province, Indonesia. J. Geoscience Engineering Environment Technology (JGEET) 4, 4, p. 1-8.
(https://journal.uir.ac.id/index.php/JGEET/article/view/2456/2277)
(Lamongan volcano unique volcanoes in Sunda Arc, with parasitic eruptions on flanks: 64 parasitic eruption centers consisting of 37 volcanic cones (bocca) and 27 ranu (maar lakes))

Yudiantoro, D.F., D.R. Ratnaningsih, P. Pratiknyo, Mahreni, D.W. Sayudi, I.P.Haty et al. (2023)- Magma evolution of Ngebel Volcano, Ponorogo, East Java, Indonesia. Indonesian J. on Geoscience (IJOG) 10, 1, p. 51-62.
(online at: https://ijog.geologi.esdm.go.id/index.php/IJOG/article/view/838)
(Ngebel Volcano part of Quaternary andesitic Wilis Volcanic Complex, E Java. Four phases of volcanic activity: Jeding (E Pleistocene basaltic andesite), Kemlandingan pyroxene andesite, Manyutan hornblende andesite and Ngebel dacite. Temporal evolution of Ngebel magma composition from mafic to more felsic)

Yudiantoro, D.F. & I. Takashima (2018)- Magmatism and geothermal potential in Pandan Volcano East Java Indonesia. J. Mineral Energi Lingkungan 2, 2, p. 50-60.
(online at: http://jurnal.upnyk.ac.id/index.php/JMEL/article/view/2214/2236)
(E Pleistocene (1.2 Ma) Pandan volcano formed on Tertiary sediments in Kendeng zone, E Java basin. Pandan potential geothermal system in basaltic-andesitic and hornblende andesite and of medium-high K calk alkaline affinity. Hot springs and calcite travertine in study area)

Yudistira, T., J.P. Metaxian, M. Putriastuti, S. Widiyantoro, N. Rawlinson, F. Beauducel, Z Zulfakriza et al. (2021)- Imaging of a magma system beneath the Merapi Volcano complex, Indonesia, using ambient seismic noise tomography. Geophysical J. International 226, 1, p. 511-523.
(online at: https://academic.oup.com/gji/article/226/1/511/6171020)
(Ambient seismic noise tomography study below Merapi-Merbabu volcano complex in 2013-2014 suggests high velocity anomaly with strike of 152°N, suggested to be of old lava, dating from double-chain volcanic arc which formed Merbabu and Old Merapi. We also identify low velocity anomaly on SW flank of Merapi which we interpret to be an active magmatic intrusion)

Yuwono, Y.S., R. Soeria-Atmadja, M.E. Suparka & R.C. Maury (1991)- Mineralogical studies of two distinct volcanic rock series of the Muria products, Central Java. In: E.P. Utomo et al. (eds.) Proc. The Silver Jubilee LIPI- Symposium on the Dynamics of subduction and its products, Yogyakarta-Karangsambung 1991, Research and Development Center for Geotechnology, Indonesian Institute of Sciences (LIPI), Bandung, p. 120-143.

Zaennudin, A. (1990)- The stratigraphy and nature of the stratocone of Mt. Cemara Lawang in the Bromo-Tengger caldera, East Java, Indonesia. M.Sc. Thesis Volcanology, Research School of Earth Science, Victoria University of Wellington, New Zealand, p. 1-229. *(Unpublished)*

Zaennudin, A. (1990)- Stratigrafi dan genesis kerucut Cemara Lawang di Kalldera Bromo-Tengger, Jawa Timur. Proc. 19th Annual Conv. Indonesian Association Geologists (IAGI), Bandung, p. 195-213.
(https://www.iagi.or.id/web/digital/48/19th-(11-13-Des-1990)-Book-II-183-201.pdf)
(Summary of 1990 thesis on Mt. Cemara Lawang stratocone in the Bromo-Tengger caldera, E Java)

Zaennudin, A., I.N. Dana & D. Wahyudin (1992)- Peta geologi Gunungapi Kelut, Jawa Timur. Direktorat Vulkanologi Indonesia (Volcanological Survey of Indonesia), Bandung.
(online at: https://vsi.esdm.go.id/gallery/picture.php?/74)
('Geologic map of the Kelut volcano, East Java')

Zaennudin, A., R.D. Hadisantono, R.D. Erfan & A.R. Mulyana (1994)- Peta geologi Gunungapi Bromo- Tengger, Jawa Timur. Direktorat Volkanologi (Volcanological Survey Indonesia), Bandung..
(online at: https://vsi.esdm.go.id/gallery/picture.php?/68/category/8)
('Geologic map of the Bromo-Tengger volcano, East Java')

Zaennudin, A., S. Primulyana & D. Siregar (2013)- Letusan Gunung Kelud pada 690 +- 110 tahun yang lalu merupakan letusan yang sangat dahsyat dan sangat berdampak pada Kerajaan Majapahit. Jurnal Lingkungan dan Bencana Geologi 4, 2, p. 117-133.
(online at: https://jlbg.geologi.esdm.go.id/index.php/jlbg/article/view/53)
('The eruption of Mount Kelud in 690 +/- 110 years ago was very powerful eruption and hada huge impact on the Majapahit Kingdom')

Zaennudin, A., I.S. Sutawidjaja & D. Aswin (1993)- Peta geologi Gunungapi Salak, Jawa Barat. Direktorat Vulkanologi Indonesia (Volcanological Survey Indonesia), Bandung.
(online at: https://vsi.esdm.go.id/gallery/picture.php?/79/category/8)
('Geologic map of the Salak volcano, West Java. 1:50,000')

Zakly, H.I., S. Zulaikah, C.A. Hapsoro, S. Maulida & M.F.R. Hasan (2024)- Chemical element analysis of Arjuno-Welirang igneous rocks. Environmental Science and Pollution Research, p. 1-13 *(in press?)*
(online at: https://www.researchgate.net/publication/380321294_Chemical_element_analysis_of_Arjuno-Welirang_igneous_rocks)
(Chemical analyses of 7 Quaternary volcanics samples from Arjuno-Welirang, E Java. Higher SiO_2 than nearby Bromo-Semeru. K_2O higher than Semeru and lower than Bromo. Calculated depth of magma origin ~148- 225 km)

Zelenov, K.K. (1969)- Aluminum and titanium in Kava Ijen volcano crater lake; Indonesia. International Geology Review 11, 1, p. 84-93.

Zen, M.T. (1969)- The state of Anak Krakatau in September 1968. Bull. of National Institute Geology and Mining (NIGM), Bandung 2, 1, p. 15-23.
(online at: https://jrisetgeotam.lipi.go.id › article › download)
(Observations on Anak Krakatau volcano by Joint Indonesian-Japanese team in September 1968. Describe minor changes in volcano morphology that took place between 1963 and 1968)

Zen, M.T. (1971)- Geothermal system of the Dieng-Batur volcanic complex. Proceedings Institut Teknologi Bandung (ITB) 6, 1, p. 23-38.
(online at: https://journals.itb.ac.id/index.php/jmfs/article/view/9732/3707)
(Geothermal system of eastern Dieng volcanic complex, C Java, originated through intersection of two major fracture zones. High chloride content suggests geothermal system system of hot water and steam, not dry steam)

Zen, M.T. (1985)- Destruction, formation and growth of the Merapi domes. Buletin Jurusan Geologi, Institut Teknologi Bandung (ITB), 14, p. 7-13.

Zen, M.T., M. Alswar, S.H. Simatupang & G. Yuniart (1983)- Tektogenesa- gravitasi dan daur magmatik di sepanjang deretan volkanik Ungaran-Merapi di Jawa Tengah. Proc. 12th Annual Conv. Indonesian Association Geologists (IAGI), Yogyakarta, p.
('Tektogenesis, gravity and magmatic cycles along the Ungaran-Merapi volcano row in Central Java')

Zen, M.T. & D. Hadikusumo (1964)- Recent changes in the Anak Krakatau volcano. Bulletin of Volcanology 27, p. 259-268.
(Visit to Anak-Krakatau in March 1963 reveal changes in Anak-Krakatau volcano since 1960. Former moonshaped crater lake (1960) disappeared and lava flows cover crater floor between inner cone and outer ring wall. Lava streams flowed over SW crater rim and spread fan-wise into sea)

Zen, M.T. & D. Hadikusumo (1965)- The future danger of Mt. Kelut (Eastern Java- Indonesia). Bulletin of Volcanology 28, 1, p. 275-282.
(Tunnel system of Hettinga Tromp proved Kelut eruption dangers can be minimized: no great lahars formed during eruption of 1951. However, eruption destroyed existing tunnels. New 1954 drainage tunnel system based on seepage principle, but failed to drain the lake completely. 23.5 million m3 of water still stored. Largest and deadliest recorded eruption of Kelut in 1586; associated lahars, caused ~10,000 casualties)

Zen, M.T. & A. Sudradjat (1983)- History of the Krakatau volcanic complex in Strait Sunda and the mitigation of its future hazards. Buletin Jurusan Geologi ITB 10, p. 1-28.

Zies, E.G. (1929)- The volcanoes of Java and Bali. EOS Transactions, American Geophysical Union 10, 1, p. 103-105. *(Abstract only)*
(Preliminary report on visits to volcananoes on Java and Bali (Batur) in summer of 1928 by American geochemist from the Carnegie Institute in Washington, Dr. Emanuel G. Zies, to sample volcano gases. Hosted by C.E. Stehn and other personnel of the 'Vulkaandienst' in Bandung. Results of Zies'analyses never fully published)

Zirkel, F. (1875)- Leucitbasalt von Gunung Bantal Susum auf der Insel Bawean bei Java. Neues Jahrbuch Mineralogie Geologie Palaontologie 1875, p, 175-176.
(online at: https://www.zobodat.at/pdf/Neues-Jb-Min-Geol-Palae_1875_0171-0224.pdf)
('Leucite basalt from the island Bawean near Java'. Brief January 1875 letter about first discovery of leucite-bearing basalts outside Europe, from Gunung Bantal Susum on Bawean island, Java Sea. In collection of Zirkel's recently deceased brother-in-law Prof. H. Vogelsang in Delft. (leucite basalts later also found in Gunung Muriah and Ringgit in NE Java, SW Sulawesi, etc.; JTvG))

Zollinger, H. (1844)- Togt naar den Salakh, op den tweeden tot vierden en vijftienden tot negentienden November, 1843. Tijdschrift voor Nederlandsch-Indie 6, 1, p. 141-176 and 7?, 3, p. 37-61.
('Trip to the Salak volcano on 2-4 and 15-19 November 1843'. Rel. comprehensive early geographic and botanical description of Salak volcano, W Java, after earlier surveys by Reinwardt, Kuhl, Van Hasselt, Hasskarl and Junghuhn (Zollinger's pioneering work was 'inexcusably ignored' in later papers by Junghuhn (Wichmann, 1896))

Zulkarnain, I. (2003)- Petrographic evidence for magma mixing beneath the Krakatau volcano and its implication for eruption magnitude and its mechanism: A preliminary view. J. RISET Geologi dan Pertambangan (LIPI) 13, 1, p. 1-11.

(Explosive eruption of Krakatau in August 1883 took place when magma composition reached dacitic stage, after change basaltic through andesite into dacite ('normal cycle of Krakatau eruptions'). Petrography suggests magma mixing and seismic data suggest two different magma chambers below Krakatau, suggesting changes in magma composition result of magma mixing, not fractionation processes)

I.4. INDONESIA- SE ASIA: MODERN ENVIRONMENTS, CARBONATES

(Numerous other papers on Recent environments and sediments and Oceanography that could be listed here but are tied to more specific sub-areas in Indonesia, may be listed under those areas)

X.1. Quaternary/Recent deposits and environments- shallow: Deltas, Tsunami deposits, Climate

Adhiperdana, B.G. Hendarmawan, K. Shibata & M. Ito (2018)- Relationships between discharge parameters and cross-sectional channel dimensions of rivers in an active margin influenced by tropical climate: The case of modern fluvial systems in the Indonesian islands. Catena 171, p. 645-680.
(Compilation of hydrological data from 649 river sites on Java, Sumatra, and Kalimantan, establishing relationships between discharge/bankfull channel width, (2) depth/ bankfull channel width, etc.)

Ai, L., S. Liu, S. Cong, H. Zhang, P. Cao, K. Wu, W. Ye, C.A. Rahim Mohamed & X. Shi (2024)- Spatial variability of surface sediments in the Malacca strait and its implications for sedimentary environments. J. Asian Earth Sciences 259, 105922, p. 1-10.
(Sediment samples from 1130km long Malacca Strait, between Malay Peninsula and Sumatra, connecting Andaman Sea with S China Sea. Residual sediments are coarsest sediments and concentrated in central region of Strait; modern terrigenous sediments distributed along coast of Malaysia and broad N region of Strait)

Ai, L., S. Liu, H. Zhang, P. Cao, X. Wu, L. He, W. Qi, K. Wu, C.A.R. Mohamed, H. Wang & X. Shia (2025)- Evolutionary history of the Malacca Strait driven by sea level changes since the last deglaciation. Global and Planetary Change 246, 104731, p.
(preprint online at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4954987)
(Opening of Malacca Strait occurred at ~10 ka. A modern strait environment was established at ~7 ka. Sea level is the first-order control of recent sedimentary evolution in Malacca Strait)

Aldrian, E. & R.D. Susanto (2003)- Identification of three dominant rainfall regions within Indonesia and their relationship to sea-surface temperature. Int. J. Climatology 23, p. 1435-1452.
(online at: http://onlinelibrary.wiley.com/doi/10.1002/joc.950/epdf)
(Three rainfall regions in Indonesia, related to island topography and sea-surface Temperature variability: (A) S Indonesia (S Sumatera to Timor, S Kalimantan, Sulawesi and part of Irian Jaya); (B) NW Indonesia (N Sumatra to NW Kalimantan); (C) Maluku and N Sulawesi. All with strong annual and (except A) semi-annual variability. Region C strongest El Nino- Southern oscillation influence)

Alongi, D.M., M. da Silva, R.J. Wasson & S. Wirasantosa (2013)- Sediment discharge and export of fluvial carbon and nutrients into the Arafura and Timor Seas: a regional synthesis. Marine Geology 343, p. 146-158.
(Islands of Timor and New Guinea significant sources of sediment. Most material delivered into Arafura and Timor Seas comes from New Guinea. Island and continental materials overlap with volcanic input from Banda Arc. Discharge from New Guinea and Timor greater than from N Australia)

Alongi, D.M., L.A. Trott, F. Tirendi, A.D. McKinnon & M.C. Undu (2008)- Growth and development of mangrove forests overlying smothered coral reefs, Sulawesi and Sumatra, Indonesia. Marine Ecology Progress Ser. 370, p. 97-109.
(Human-induced shifts from fringing reef-dominated to mangrove-dominated coastal habitats in S Sumatra and SW Sulawesi)

Amijaya, H. & Ngisomuddin (2007)- Textural characteristics of tsunamiite: study on recent tsunami deposit at Pangandaran coast, Ciamis and Parendog coast, Yogyakarta. Proc. Joint Convention 32nd HAGI, 36th IAGI and 29th IATMI, Bali, p. 1103-1109.
(online at: https://www.iagi.or.id/web/digital/28/2007_IAGI-Bali_Textural-Characteristics-of-Tsunamiite.pdf)
(Recent tsunamiites of Java S coast have erosional base, homogeneous m-f sand grain size and no fining-upward trend. Sedimentary structures parallel lamination in lower part and ripples in upper part)

Arp, G., A. Reimer & J. Reitner (2003)- Microbialite formation in seawater of increased alkalinity, Satonda Crater Lake, Indonesia. Journal of Sedimentary Research 73, p. 105-127.
(Crater lake of Satonda, a small volcanic island 3 km NW of Sumbawa, with red-algal microbial reefs in marine-derived water of increased alkalinity. Potential analogue for ancient microbialites in open-marine facies)

Arp, G., J. Reitner, G. Worheide & G. Landmann (1996)- New data on microbial communities and related sponge fauna from the alkaline Satonda crater lake (Sumbawa, Indonesia). Gottinger Arbeiten Geologie Palaeontologie, Sonderband SB2, p. 1-7.
(Crater lake of Satonda, a small volcanic island 3 km NW of Sumbawa, with high-alkaline water. With well-developed 'stromatolitic' red algal- microbialite reefs with demosponges in upper ~20m)

Ashton, P.S. (2014)- On the forests of tropical Asia- lest the memory fade. Royal Botanic Gardens Kew and Arnold Arboretum, Harvard University, p. 1-670.

Ashton, P.S. (2017)- Patterns of variation among forests of tropical Asian mountains, with some explanatory hypotheses. Plant Ecology Diversity 10, 5-6, p. 361-377.
(online at: https://www.tandfonline.com/doi/abs/10.1080/17550874.2018.142902)
(Review of modern forests zonation in tropical Asia: lowland forests, lower montane forests, upper montane forests, subalpine thicket/ shrublands)

Aswan & Y. Rizal (2021)- Identification of suspected paleotsunami deposits study from Karapyak Beach, Pangandaran area, West Jawa, Indonesia. Bulletin of the Marine Geology, 36,2, p. 75-83.
(online at: https://media.neliti.com/media/publications/381443-none-f1ee23b1.pdf)
(Karapyak Beach near Pangandaran, SW Java, paleotsunami deposit light brown loose sand overlying a dark brown paleosoil layer with erosional contact. Base of lower part rich with broken mollusc shells and corals, the mid-top of lower part may contain several intact mollusc shells and corals, rock fragments and anthropogenic products. Foraminifera mixture of shallow and deep marine species)

Bachtiar, A., M. Reza, A. Krisyunianto & Y.S. Purnama (2011)- Sedimentology of Kalianyar Delta, Indramayu, Northwest Java basin: uniques tidal and wave interaction in a supposedly river dominated delta. Proc. Joint 36th HAGI and 40th IAGI Annual Conv., Makassar, JCM2011-470, p. 1-15.
(online at: https://www.iagi.or.id/web/digital/10/2011_IAGI_Makassar_Sedimentology-of-Kalianyar-Delta.pdf)
(Kalianyar Delta modern delta on N coast of Indramayu, NW Java. Morphologically classified as river-dominated 'bird-foot' delta, but field survey common influence of wave and tidal processes)

Bachtiar, A., J. Wiyono, Liyanto, M. Syaiful, Y.S. Purnama et al. (2010)- , cores, and salinity. Proc. HAGI-SEG International Geosciences Conference, Bali 2010, IGCE10-OP-009, p. 1-10.
(Modern Mahakam delta sediments study. Most channel thalwegs devoid of sands; grab samples usually found semi-consolidated clay instead. Active sand transportation and deposition on slopes of point bars and side bars. Shallow cores in lower delta plain generally characterized by clay drapes, suggesting tidal processes)

Baker, E.K., P.T. Harris, J.B. Keene & S.A. Short (1995)- Patterns of sedimentation in the macrotidal Fly River delta, Papua New Guinea. In: B.W. Flemming & A. Bartholomae (eds.) Tidal signatures in modern and ancient sediments, Int. Association of Sedimentologists (IAS), Special Publ. 24, p. 193-211.

Benzerara, K., A. Meibom, Q. Gautier, J. Kazmierczak, J. Stolarski et al. (2010)- Nanotextures of aragonite in stromatolites from the quasi-marine Satonda crater lake, Indonesia. In: H.M. Pedley & M. Rogerson (eds.) Tufas and speleothems: unravelling the microbial and physical controls, Geological Society, London, Special Publ. 336, p. 211-224.
(On composition and texture of aragonite in lacustrine stromatolites from alkaline crator lake of Satonda)

Bird, E.C.F. & O.S.R. Ongkosongo (1980)- Environmental changes on the coasts of Indonesia. The United Nations University, United Nations University Press, Tokyo, p. 1-55.

(online at: www.unu.edu/unupress/unupbooks/80197e/80197E00.htm)
(Overview of coastal progradation along various coastlines of Indonesia)

Bird, M.I., D. Taylor & C.Hunt (2005)- Palaeoenvironments of insular Southeast Asia during the last glacial period; a savanna corridor in Sundaland? Quaternary Science Reviews 24, 20-21, p. 2228-2242.
(online at: https://www.researchgate.net/publication/313759617_Paleoenvironments_of_insular_Southeast_Asia_during_the_last_glacial_period_A_savanna_corridor_in_Sundaland)
(Geomorphology, palynology, biogeography and vegetation/climate modelling suggests N-S 'savanna corridor' through Sundaland continent at Last Glacial Period at time of lowered sea-level. Minimal interpretation of 50-150 km wide zone of open savanna vegetation along divide between S China and Java Seas, forming land bridge between Malay Peninsula, Sumatra, Java and Borneo and served as barrier to dispersal of rainforest-dependent species between Sumatra and Borneo. Savanna corridor may have provided convenient route for rapid early dispersal of modern humans through region and on into Australasia)

Brown, I.M. (1990)- Quaternary glaciations of New Guinea. Quaternary Science Reviews 9, p. 273-280.
(New Guinea mountains covered by glaciers at ~300 ka and at ~700 ka. Mean annual T was at least 6-7°C lower. Glaciers receded by 13 ka BP and New Guinea may have been ice free by 7 ka. Glaciers developed again at ~5 ka. At least four significant re-advances during last 3.5 ka. Little Ice Age ended 120-150 years ago and glaciers retreating to present day)

Brune, S., A.Y. Babeyko, S. Ladage & S.V. Sobolev (2010)- Landslide tsunami hazard in the Indonesian Sunda Arc. Natural Hazards Earth System Sciences 10, p. 589-604.
(online at: https://www.nat-hazards-earth-syst-sci.net/10/589/2010/nhess-10-589-2010.pdf)
(Review of tsunamigenic events triggered by submarine landslides. Largest documented recent slides (SE of Sumba, etc.) volume of 15-20 km^3. Many large tsunamigenic landslides ultimately triggered by earthquakes)

Brune, S., S. Ladage, A.Y. Babeyko, C. Muller, H. Kopp & S.V. Sobolev (2009)- Submarine landslides at the eastern Sunda margin: observations and tsunami impact assessment. Natural Hazards 54, 2, 547-562.
(online at: http://edoc.gfz-potsdam.de/gfz/get/14283/0/b800b700926b1f854f8f70c2e84b0c4a/14283.pdf)
(New bathymetric data show six large submarine slides at E Sunda margin between C Java and Sumba. Volumes between 1 km³ in Java fore-arc basin up to 20 km³ at trench off Sumba and Sumbawa)

Caline, B. & J. Huong (1992)- New insights into the recent evolution of the Baram Delta from satellite imagery: Bull. Geological Society Malaysia 32, p. 1-13.
(online at: https://gsmpubl.files.wordpress.com/2014/09/bgsm1992012.pdf)

Cannon, C.H., R.J. Morley & A.B.G. Bush (2009)- The current refugial rainforests of Sundaland are unrepresentative of their biogeographic past and highly vulnerable to disturbance. Proc. National Academy of Sciences USA (PNAS) 106, 27, p. 11188- 11193.
(online at: www.pnas.org/content/early/2009/06/18/0809865106.full.pdf)
(Model reconstruction of forest types across exposed Sunda Shelf during Pleistocene Last Glacial Maximum, suggesting rainforests covered substantially larger area than today (see also Wurster et al. 2010 who argued for more savannah vegetation; JTvG))

Cecil, C.B., F.T. Dulong, J.C. Cobb & Supardi (1993)- Allogenic and autogenic controls on sedimentation in the Central Sumatra basin as an analogue for Pennsylvanian coal-bearing strata in the Appalachian basin. In: J.C. Cobb & C.B. Cecil (eds.) Modern and ancient coal-forming environments, Geological Society of America (GSA), Special Paper 286, p. 3-22.
(Modern influx of fluvial sediment to Sunda shelf/ Strait of Malacca from Sumatra restricted by rain forest cover in equatorial ever-wet climate belt. Much of marine and estuarine environments erosional or non-depositional, except for localized deposition in slack water areas, such as downstream end of islands. Thick (>13m), laterally extensive (>70,000 km^2) peat deposits forming on poorly drained coastal lowlands)

Cecil, C.B., F.T. Dulong, R.A. Harris, J.C. Cobb, H.G. Gluskoter & H. Nugroho (2003)- Observations on climate and sediment discharge in selected tropical rivers, Indonesia. In: C.C Blaine et al. (eds.) Climate controls on stratigraphy, Soc. Sedimentary Geology (SEPM), Special Publ. 77, p. 29-50.
(Factors influencing fluvial sediment discharge include catchment-basin size, relief, gradient, tectonic setting, bedrock lithology, rainfall. Dominant variable affecting fluvial sediment discharge among islands of Indonesia appears to be seasonality in rainfall, regardless of tectonic setting, relief or catchment-basin size)

Chabangborn, A., K.K.A. Yamoah, S. Phantuwongraj & M. Choowon (2018)- Climate in Sundaland and Asian monsoon variability during the last deglaciation. Quaternary International 479, p. 141-147.
(Warming S Hemisphere caused S-ward shift of Intertropical Convergent Zone (ITCZ) and weakened summer monsoon in Asian monsoon region between 18.5- 15 ka BP. Warmer N Hemisphere strengthened summer monsoon intensity in Asian monsoon region and moved ITCZ to N between 15 and 13.5 ka BP, Opposing precipitation pattern between E and Wt Indian Ocean suggested potential influence of Walker circulation on the Sundaland climate from 13.5-11 ka BP)

Chapkanski, S., G. Brocard, F. Lavigne, T. Afrizal, E. Meiliand, N. Ismail, J. Majewski et al. (2025)- Mid-to late-Holocene fluvial and coastal evolution in the Aceh River delta, Sumatra: effects of sea-level change, sediment supply, wave climate, tectonics and tsunamis. Quaternary Science Advances 19, 100290, p. 1-18.
(online at: https://www.sciencedirect.com/science/article/pii/S2666033425000267)
(On processes affecting growth of Aceh River delta at NW-most tip of Sumatra during last 6 kyrs. Formed in NW-SE trough basin along trace of the Great Sumatran fault)

Clift, P.D. (2006)- Controls on the erosion of Cenozoic Asia and the flux of clastic sediment to the ocean. Earth Planetary Science Letters 241, p. 571-580.
(Rates of continental erosion reconstructed from volumes of clastic sediment, most of which offshore. Sediment flux from mainland Asia first peaked in E-M Miocene (24-11 Ma), well before initiation of glacial climate, indicating that rock uplift and precipitation are key controls on erosion over long periods of time. In E Asia faster erosion correlates with more humid, warm climates in E-M Miocene, changing to less erosive, drier climates after 14 Ma when Antarctic glaciation begins. Average sedimentation rates on most E Asian continental margins since 1.8 Ma 5-6 times less than modern fluvial flux)

Clift, P.D. (2020)- Asian monsoon dynamics and sediment transport in SE Asia. J. Asian Earth Sciences 195, 104352, p. 1-11.
(Asian monsoon is dominant climatic phenomenon in SE Asia, responsible for most regional precipitation. Strong monsoons associated with intensified reworking of pre-existing floodplain sediments over millennial timescales, and deliver/ deposition more sediment than during more arid times. Over longer time periods strengthening of monsoon linked to faster bedrock erosion and increased sediment flux of ocean.Over long time periods, monsoon is subsidiary to effects of global cooling at least since M Miocene)

Clift, P.D. & R.A. Plumb (2008)- The Asian monsoon: causes, history and effects. Cambridge University Press, p. 1-288.
(Asian monsoon large-scale seasonal reversal of normal atmospheric circulation pattern. Low-pressure systems develop in tropics due to rising hot air that cools and descends in subtropics (arid regions). In contrast, summer heating of Asian continent (mainly Tibetan Plateau) generates low-pressure cells and summer rains in S and E Asia. In winter reversed high-P system established, with dry, cold winds blowing out of Asia. Monsoon intensity varies in 21, 40 and 100 thousand year timescale, with periods of glacial advance and retreat: summer monsoons strong and winter monsoons weaker during warm, interglacial periods (reverse in glacial times))

Coleman, J.M., S.M. Gagliano & W.G. Smith (1970)- Sedimentation in a Malaysian high tide tropical delta. In: J.P. Morgan & R.H. Shaver (eds.) Deltaic sedimentation, modern and ancient. Soc. Economic Min. Paleont. (SEPM), Special Publ. 15, p. 185-197.
(Study of sedimentation in Klang and Langat Rivers delta in Malacca Strait)

Consentius, W.U. (1974)- Die Kusten des Sudostlichen Asien. Ph.D. Thesis, Technische Universitat Berlin, p. 1-231.
('The coasts of SE Asia'. Geographic description of coastlines and processes in SE Asia)

Corlett, R.T. (2009)- The ecology of tropical East Asia. Oxford University Press, New York, p. 1-272.
(Review of terrestrial ecology of East Asian tropics and subtropics, from S China to W Indonesia)

Crame, J.A. & B.R. Rosen (2002)- Cenozoic palaeogeography and the rise of modern biodiversity patterns. In: J.A. Crame & A.W. Owen (eds.) Palaeobiogeography and biodiversity change: the Ordovician and Mesozoic-Cenozoic radiations, Geological Society, London, Special Publ. 194, p. 153-168.

Darlan, Y., K.T. Dewi & R. Kapid (2007)- Dinamika pantai Indramayu Jawa Barat: tekstur sedimen dan mikrofauna. Proc. 32nd HAGI, 36th IAGI and 20th IATMI Annual Conference Exhibition, Bali, p. 1133-1151.
(online at: www.iagi.or.id/web/digital/28/2007_IAGI-Bali_Dinamika-Pantai-Indramayu-Jawa-Barat.pdf)
('Coastal dynamics of Indramayu, West Java: sediment texture and microfauna'. Sediments and microfaunas (ostracods, calcareous nannoplankton) in two Holocene shallow core holes along Balongan- Indramayu coast)

Darlan, Y., Y. Noviadi & H. Prasetyo (1996)- Studi proses sedimentasi perairan Serwatu dan sekitarnya, Kepulauan Aru, Maluku Tenggara. Proc. 25th Annual Conv. Indonesian Association Geologists (IAGI), Bandung, 2, p. 127-147.
('Study of sedimentation processes in waters around Serwatu, Aru Islands, Moluccas')

Dawson, A.G., S. Shi, S. Dawson, T. Takahashi & N. Shuto (1996)- Coastal sedimentation associated with the June 2nd and 3rd, 1994 tsunami in Rajegwesi, Java. Quaternary Science Reviews 15, 8-9, p. 901-912.
(Recent tsunami deposits along NE Java coast)

De Bruyn, M., L. Ruber, S. Nylinder, B. Stelbrink, N.R. Lovejoy, S. Lavoue, H.H. Tan, E. Nugroho et al. (2013)- Paleo-drainage basin connectivity predicts evolutionary relationships across three Southeast Asian biodiversity hotspots. Systematic Biology 62, 3, p. 398-410.
(Molecular genetic data from freshwater fishes across three biodiversity hotspots in SE Asia, to test effect of Quaternary climate change and drainage rearrangements on aquatic faunal diversification. Paleo-drainage re-arrangements played significant role in spatiotemporal evolution of lowland aquatic taxa)

Dewi, A.Y. & S.S. Surjono (2010)- Tipe-tipe pembentukan delta di Pantai utara Jawa. Proc. 39th Annual Conv. Indonesian Association Geologists (IAGI), Lombok, PIT-IAGI-2010-287, p. 1-12.
(online at: https://www.iagi.or.id/web/digital/12/2010_IAGI_Lombok_Tipe-Tipe-Pembentukan-Delta.pdf)
('Delta sedimentation types along North coast of Java'. Review of modern delta types along Java north coast. Two main types: (1) fluvial-dominated Mississippi/ birdfoot type (high sediment supply), and (2) Sao Francisco type (dominant marine control and lower sediment supply)

Dong, W.S., A. Ismailluddin, L.S. Yun, E.H. Ariffin, C. Saengsupavanich, K.N.A. Maulud, M.Z. Ramli et al. (2024)- The impact of climate change on coastal erosion in Southeast Asia and the compelling need to establish robust adaptation strategies. Heliyon 10, 4, e25609, p. 1-20.
(About link between climate change and coastal erosion in SE Asia, in terms of sea-level rise, storm surge, and monsoon patterns)

Dubois, N., D.W. Oppo, V.V. Galy, M. Mohtadi, S. van der Kaars, J.E. Tierney, Y. Rosenthal et al. (2014)- Indonesian vegetation response to changes in rainfall seasonality over the past 25,000 years. Nature Geoscience 7, p. 513-517.
(online at: http://www.whoi.edu/fileserver.do?id=186164&pt=2&p=17766)
(Climate proxy data 30 surface marine sediment samples from throughout Indo-Pacific warm pool. Sediment core from offshore NE Borneo show broadly similar vegetation during Last Glacial Maximum and Holocene, suggesting that, despite generally drier glacial conditions, no pronounced dry season. Core off Sumba indicates enhanced dry season aridity and water stress during most recent glaciation)

Ellis, B. (2021)- Holocene climate and ocean variability in the Sunda Strait region of the eastern Indian Ocean. Ph.D. Thesis Australian National University, p. 1-349.
(online at: https://openresearch-repository.anu.edu.au/bitstream/1885/219249/2/ELLIS_complete_thesis.pdf)
(Holocene climate signal and influence of Indian Ocean Dipole (IOD) climate oscillation from isotopes, etc., in sediment cores and Porites corals))

Engelhart, S.E., B.P. Horton, D.H. Roberts, C.L. Bryant & D.R. Corbett (2007)- Mangrove pollen of Indonesia and its suitability as a sea-level indicator. Marine Geology 242, p. 65-81.
(SE Sulawesi mangrove zonations parallel to shoreline and dominated by Rhizophoraceae, with Avicennia, Heritiera and Sonneratia also important. Elevation significant control on distribution of pollen assemblages)

Fontaine, H. (1971)- Depots coquilliers du delta du Mekong. Archives Geologiques Vietnam 14, p. 135-141.
('Shell deposits of the Mekong Delta'. During Flandrian, large area of Mekong delta was covered by sea, which after withdrawal left traces of paleo-shorelines and shell deposits. C14 ages of shells 4150- 5680 BP)

Galey, M.L., A. van der Ent, M.C.M. Iqbal & N. Rajakaruna (2017)- Ultramafic geoecology of South and Southeast Asia. Botanical Studies 58,18, p. 1-28.
(online at: https://link.springer.com/content/pdf/10.1186%2Fs40529-017-0167-9.pdf)
(Globally, ultramafic outcrops known for floras with high levels of endemism, including plants adapted to nickel or manganese hyperaccumulation. Soils derived from ultramafic regoliths generally nutrient-deficient, with major cation imbalances and high concentrations of potentially toxic trace elements, especially nickel. SE Asian region large surface occurrences of ultramafic regoliths, but geoecology still poorly studied)

Gathorne-Hardy, F.J., Syaukani, R.G. Davies, P. Eggleton & D.T. Jones (2002)- Quaternary rainforest refugia in South-East Asia: using termites (Isoptera) as indicators. Biological J. Linnean Society 75, p. 453-466.
(online at: https://academic.oup.com/biolinnean/article/75/4/453/2639628)
(In SE Asia, during Quaternary glaciations increased seasonality and sea level drops of ~120m caused fragmentation of rainforest. During Last Glacial Maximum, most of Thailand, Peninsula Malaysia, W and S Borneo, E and S Sumatra, and Java probably covered by savannah. Rainforest refugia probably present in N and E Borneo, N and W Sumatra and Mentawai islands.)

Goltenboth, F., K.H. Timotius, P.P. Milan & J. Margraf (eds.) (2006)- Ecology of insular Southeast Asia, The Indonesian Archipelago. Elsevier Science, p. 1-568.
(Reviews of modern marine and terrestrial ecosystems of Indonesia (mainly biology))

Griffiths, M.L., R.N. Drysdale, M.K. Gagan, J.X. Zhao, J.C. Hellstrom, L.K. Ayliffe & W.S. Hantoro (2013)- Abrupt increase in East Indonesian rainfall from flooding of the Sunda Shelf ~9500 years ago. Quaternary Science Reviews 74, p. 273-279.
(Stalagmite record from Liang Luar Cave, Flores, suggests rapid increase in Indonesian monsoon rainfall at ~9.5 ka, synchronous with rapid expansion of rainforest in NE Australia, regional freshening of S Makassar Strait and ~1.5 °C cooling in upper thermocline of Timor Sea, indicative of reduced surface heat transport by Indonesian Throughflow when Java Sea opened during postglacial sea-level rise. Increase in monsoon rainfall tied to sudden increase in ocean surface area and/or temperature in monsoon source region as Sunda Shelf flooded during deglaciation)

Gugliotta, M., Y. Saito, V.L. Nguyen, T.K.O. Ta, T. Tamura & S. Fukuda (2018)- Tide- and river-generated mud pebbles from the fluvial to marine transition zone of the Mekong River delta, Vietnam. Journal of Sedimentary Research 88, 9, p. 981-990.
(Mud clasts present in most samples from channel in Mekong River and Delta channels. Formed by erosion of previously deposited fluvial and tidal mud layers)

Gupta, A. (ed.) (2005)- The physical geography of Southeast Asia. Oxford University Press, Oxford, p. 1-440.

Haberle, S.G. (2003)- The emergence of an agricultural landscape in the highlands of New Guinea. Archaeology in Oceania 38, 3, p. 149-158.
(Pollen and sedimentological evidence in highlands of New Guinea, from 5 sites from highland valleys (1400-1890m altitude), covering period from Last Glacial Maximum (22 ka) to Present. Earliest indications of agricultural impact in vegetation record around 7800 cal BP. Subsequent vegetation change reflects increases in anthropogenic impact, punctuated by peak episodes of vegetation change towards more open landscape. Emergence of an agricultural landscape in New Guinea is seen as a result of gradual indigenous development)

Haberle, S.G., G.S. Hope & Y. Defretes (1991)- Environmental change in the Baliem Valley, montane Irian Jaya, Republic of Indonesia. J. of Biogeography 18, p. 95-40.
(online at: www.academia.edu/17017366/Environmental_Change_in_the_Baliem_Valley_Montane_I Etc.)
(Floor of the Baliem Valley, at ~1420- 1600m altitude and montane tropical climate, largely cleared and initial date for burning and slope degradation is 26,000 yr BP, based on charcoal in slope wash. Pollen and magnetic analyses show high level of human disturbance since that time. Casuarina widely grown after 2900 yr BP)

Hanebuth, T.J.J., U. Proske, Y. Saito, V. Nguyen & K. Thi (2012)- Early growth stage of a large delta-transformation from estuarine-platform to deltaic-progradational conditions (the northeastern Mekong River Delta, Vietnam). Sedimentary Geology 261-262, p. 108-119.
(Mekong Delta early delta growth during transgression-related inundation between 8 ka BP (maximum flooding) and 5.7 ka BP (sea-level highstand), characterized by tide-and marine-influenced nearshore conditions with extensive mangrove and tidal-flat deposits aggrading on wide abrasion platform. Onset of regression/ progradation at ~4.8 ka)

Hantoro, W.S. (1993)- Dynamics of Indian-Pacific ocean gateways: Pleistocene sea-level study in Savu area using uplifted coral reef terraces. In: F. Hehuwat et al. (eds.) Proc. International Workshop on Neogene Evolution of Pacific Ocean Gateways, Bandar Lampung 1993, p. 21-28.

Hantoro, W.S. (1996)- Quaternary sea level variations in the Pacific- Indian Ocean gateways: response and impact. Quaternary International 37, p. 73-80.
(On Pacific to Indian Ocean water flow during last glacial maximum)

Hapsari, K.A., S. Biagioni, T.C. Jennerjahn, P.M. Reimer, A. Saad, Y. Achnopha, S. Sabiham & H. Behling (2017)- Environmental dynamics and carbon accumulation rate of a tropical peatland in Central Sumatra, Indonesia. Quaternary Science Reviews 169, p. 173-187.
(Analyses of peat core from Sungai Buluh peatland in C Sumatra suggests that peat and C accumulation rates driven mainly by sea level change, river water level, climatic variability and anthropogenic activities)

Hapsari, K.A., T.C. Jennerjahn, S.H. Nugroho, E. Yulianto & H. Behling (2021)- Sea level rise and climate change acting as interactive stressors on development and dynamics of tropical peatlands in coastal Sumatra and South Borneo since the Last Glacial Maximum. Global Change Biology 28, p. 3459-3479.
(online at: https://onlinelibrary.wiley.com/doi/pdf/10.1111/gcb.16131)
(Paleoecological studies in Kampar Peninsula (coastal Riau) and Katingan (C Kalimantan) peatlands. Changes in precipitation and sea level led to shifts in peat swamp vegetation and peat accumulation rates)

Hapsari, K.A., T.C. Jennerjahn, S.H. Nugroho, E. Yulianto & H. Behling (2022)- Analysis of KP peat core from the Kampar Peninsula, Riau, Sumatra Indonesia. PANGAEA, *(at online data publisher)*
(online at: https://doi.pangaea.de/10.1594/PANGAEA.941445)
(Paleoecological and palynological investigation of two Quaternary peat cores from E Sumatra coastal area)

Hapsari, K.A., T.C. Jennerjahn, S.H. Nugroho, E. Yulianto & H. Behling (2022)- Pollen and spores of the KP peat core from the Kampar Peninsula, Riau, Sumatra Indonesia. PANGAEA *(at online data publisher)*
(online at: https://doi.pangaea.de/10.1594/PANGAEA.941439)

Harris, P.T., E.K. Baker, A.R. Cole & S.A. Short (1993)- A preliminary study of sedimentation in the tidally dominated Fly River delta, Gulf of Papua. Continental Shelf Research 13, 4, p. 441-472.
(Tidal currents dominate in transport of sandy sediments throughout Fly River Estuary, PNG)

Harris, P.T., M.G. Hughes, E.K. Baker, R.W. Dalrymple & J.B. Keene (2004)- Sediment transport in distributary channels and its export to the pro-deltaic environment in a tidally dominated delta: Fly River, Papua New Guinea. Continental Shelf Research 24, 19, p. 2431-2454.

Heads, M. (2002)- Regional patterns of biodiversity in New Guinea animals. J. of Biogeography 29, p. 285-294.

Heads, M. (2003)- Ericaceae in Malesia: vicariance biogeography, terrane tectonics and ecology. Telopea 10, 1, p. 311-449.
(online at: www.rbgsyd.nsw.gov.au/_data/assets/pdf_file/0006/72726/Tel10Hea311.pdf)
(Paper discussing present-day plant distribution in SE Asia (mainly Erica, Rhododendron groups) and relation to plate tectonic history. Many terranes or groups of terranes have endemic species. Many distributions are hard to explain with present-day ecology, but can be understood through tectonic history)

Heaney, L.R. (1991)- A synopsis of climatic and vegetational change in Southeast Asia. Climatic Change 19, 1-2, p. 53-61. *(online at: www.academia.edu/download/45139460/A_Synopsis_of_Climatic_and_Vegetational_20160427 Etc.)*
(Tropical rain forest in SE Asia developed in extensive archipelago during past 65 My or more. Miocene rain forest extended further N (to S China and Japan). Pleistocene development of continental glaciers at high latitudes associated in SE Asia with lowered sea level, cooler temperatures, and modified rainfall patterns. SE Asian vegetation during last glacial maximum (ca. 18,000 BP) different from that of today, with increase in extent of montane vegetation and savannah and decline in rain forest)

Hehanussa, P.E., S. Hadiwisastra & S. Djoehanah (1975)- Sedimentasi delta baru Cimanuk. Geologi Indonesia (IAGI) 3, 1, p. 21-35.
('Sedimentation of the new Cimanuk delta', NW Java)

Heikoop, J.M., C.J. Tsujita, M.J. Risk, T. Tomascik & A.J. Mah (1996)- Modern iron ooids from a shallow-marine volcanic setting; Mahengetang, Indonesia. Geology (GSA) 24, 8, p. 759-762.
(Unconsolidated deposit of iron ooids and pisoids off volcanic island Mahengetang, Sangihe Arc, in shallow-marine setting, in area of venting of hydrothermal fluids and expulsion of gas. Ooids composed of concentric accretionary layers of limonite admixed with amorphous silica, precipitated around andesitic rock fragments)

Hoekstra, P. (1989)- River outflow, depositional processes and coastal morphodynamics in a monsoon-dominated deltaic environment, East Java, Indonesia. Doct. Thesis University of Utrecht, Netherlands Geographical Studies (Koninklijk Nederlands Aardrijkskundig Genootschap) 87, p. 1-214.
(On sediment discharge at Solo and Brantas/ Porong River deltas, E Java. Part of 1984-1985 Snellius II program)

Hoekstra, P. (1989)- Hydrodynamics and depositional processes of the Solo and Porong Deltas, East Java, Indonesia. In: W.J.M. van der Linden (ed.) Coastal Lowlands, Proc. KNGMG Symposium 'Coastal lowlands geology and Geotechnology', Kluwer Academic Publishers, Dordrecht, p. 161-173.
(High input of sediment into coastal waters by Solo and Porong rivers resulted in rapid development of two-delta-systems. Solo delta mud-dominated, rapidly prograding elongate (single-finger) delta, while Porong delta is lobate, multidistributary delta)

Hoekstra, P. (1993)- Late Holocene development of a tide-induced elongate delta, the Solo delta, East Java. Sedimentary Geology 83, p. 211-233.
(Review of delta of monsoonal Solo River. Late Quaternary mud-dominated, rapidly prograding, elongate 'single-finger' delta with well-developed natural levees)

Hoekstra, P., R.F. Nolting & H.A. van der Sloot (1989)- Supply and dispersion of water and suspended matter of the rivers Solo and Brantas into the coastal waters of East Java, Indonesia. In: J.E. van Hinte et al. (eds.) Proc. Snellius II Symposium, Jakarta 1987, Netherlands J. of Sea Research 23, 4, p. 501-515.

Hoekstra, P. & Tiktanata (1988)- Coastal hydrodynamics, geomorphology and sedimentary environments of two major Javanese river deltas; program and preliminary results from the Snellius-II expedition (Indonesia). J. Southeast Asian Earth Sciences 2, 2, p. 95-106.
(online at: https://www.academia.edu/48585721/Coastal_hydrodynamics_geomorphology_and_sedimentary_envir Etc.)
(Study of river outflow, sediment transport, depositional facies and delta morphology of Solo and Porong river deltas, E Java. Very high denudation rates. Sediment transport mainly restricted to wet season. Solo delta single-finger delta. Porong delta half-circular, lobate delta with multidistributary network of channels)

Hoogendoorn, R.M. (2006)- The impact of changes in sediment supply and sea-level on fluvio-deltaic stratigraphy. Ph.D. Thesis, Technische Universiteit Delft, p. 1-153. *(Unpublished)*
(online at: repository.tudelft.nl/assets/uuid.../ceg_hoogendoorn_20060131.pdf
(With chapter of Late Holocene evolution of Mahakam Delta, E Kalimantan, based on Storms et al. (2005))

Hope, G.S. (2001)- Environmental change in the Late Pleistocene and later Holocene at Wanda site, Soroako, South Sulawesi, Indonesia. Palaeogeogr. Palaeoclim. Palaeoecology 171, p. 129-145.
(Pollen analysis of 8m core from mire at 445m altitude on ultramafic soil near W shore of Lake Matano. Montane forest grew continuously from~75,000- 50 yrs B.P. Increase in grass and Casuarina at ~35-17 ka indicate possible drier conditions)

Hope, G.S. (2004)- Glaciation of Malaysia and Indonesia, excluding New Guinea. In: Quaternary Glaciations Extent and Chronology- III: South America, Asia, Africa, Australasia, Antarctica. Developments Quaternary Science 2, 3, p. 211-214.
(Brief review of Pleistocene glaciation of Mt Kinabalu (Sabah, 4100m) above ~3000m, and deglaciated by end of Pleistocene. Volcanic mountains of Java, Sumatra, Lombol, etc.may have exceeded Pleistocene snowline of 3000-3500m, but have not preserved many traces of glaciation. Van Beek (1982) argued that area of about 100 km^2 was glaciated in Mount Leseur massif in N Sumatera)

Hope, G.S. (2005)- The Quaternary in Southeast Asia. In: A. Gupta (ed.) The physical geography of Southeast Asia, Oxford University Press, Chapter 2, p. 24-37.
(online at: https://d1wqtxts1xzle7.cloudfront.net/59041007/epdf.tips_the-physical-geography-of-southeast-asia-oxford-re20190426-15928-1bsfvqp-libre.pdf Etc.)

Hope, G.S. (2015)- Peat in the mountains of New Guinea. Mires and Peat 15, 13, p. 1-21.
(online at: http://mires-and-peat.net/media/map15/map_15_13.pdf)
(Peatlands common in montane areas above 1000m in New Guinea and extensive above 3000m. Montane mires up to 4-8m deep and up to 30,000 years in age. Above 3000m peat soils form under blanket bog on slopes as well as on valley floors. Typical peat depths 0.5-1 m on slopes, but valley floors up to 10m of peat. Peats record vegetation shifts at 28, 17-14 and 9 ka and variable history of human disturbance from 14 ka)

Hope, G.S., A.P. Kershaw, S. van der Kaars, X. Sun, P.M. Liew, L.E. Heusser, H. Takahara et al. (2004)- History of vegetation and habitat change in the Austral-Asian region. Quaternary International 118, p. 103-126.
(Climate reconstruction of last 200kyrs from Russian Arctic to SE Asia and SW Pacific)

Horton, B.P., P.L. Gibbard, G.M. Milne, R. J. Morley, C. Purintavaragul & J.M. Stargardt (2005)- Holocene sea levels and palaeoenvironments of the Malay-Thai Peninsula, southeast Asia. The Holocene 15, 8, p. 1199-1213.
(Sedimentology and palynology studies at Great Songkhla Lakes and other areas of Malay-Thai Peninsula suggest Holocene relative sea level rise from -22 m at ~9500 yr BP to mid-Holocene high stand of 4850-4450 yr BP, followed by sea-level fall at steady at ~1.1 mm/yr)

Hummel, K. (1931)- Sedimente indonesischer Susswasserseen. Archiv fur Hydrobiologie, Suppl.-Band 8, p. 615-676.
('Sediments of Indonesian fresh water lakes'. Analyses of sediment samples from lakes on Java and Sumatra)

Husein, S. (2006)- Tidal influence on sedimentation processes of the Mahakam Delta, East Kalimantan. Proc. 35th Annual Conv. Indonesian Association Geologists (IAGI), Pekanbaru, p. 1-13.
(Hydrodynamic measurements and bottom samples study in Mahakam Delta. Sand at bottom of distributaries at delta apex and gradually fines seaward but does not extend to channel mouths. Most bedload sediment transport during spring tide. Mud dominates offshore, in estuaries and distal reaches of distributaries. Sand-mud couplets upstream to at least delta apex. Benthic marine organisms up to 20 km upstream in distributaries. Fluvial dominance constrained to upper reaches of active distributaries, tides most important process on delta)

Husein, Salahuddin (2008)- Modern sediment dynamics and depositional systems of the Mahakam Delta, Indonesia Ph.D. Thesis, Universiti Brunei Darussalam, Bandar Seri Begawan, p. 1-740. *(Unpublished)*

Husein, Salahuddin & J.J. Lambiase (2005)- Modern sediment dynamics of the Mahakam Delta. Proc. 30th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, 1, p. 367-379.
(Description of present-day Mahakam Delta environments. Mixed fluvial and tide-dominated delta)

Kamaludin B. & B.Y. Azmi (1997)- Interstadial records of the last glacial period at Pantai Remis, Malaysia. J. Quaternary Science 12, 5, p. 419-434.
(Two eustatic high sea stands during last glacial period recognised at Pantai Remis, both lower than present-day sea-level: (1) 14.6m, synchronous with Oyxgen Isotope Stage 5a; (2) 4.3 m, dated as ~54ka. Palynology data show interstadial coastal Pandanus and mangrove swamps, succeeded by mixed freshwater swamp forests of Campnosperma- Calophyllum assemblage, followed by drier mixed swamp forest)

Kazmierczak, J. & S. Kempe (1993)- Recent cyanobacterial counterparts of Paleozoic *Wetheredella* and related problematic fossils. Palaios 7, p. 294-304.
(Recent calcareous structures resembling stromatolites generated by cyanobacteria in alkaline crater lake of small Satonda island, N of Sumbawa)

Kempe, S. & J. Kazmierczak (1990)- Chemistry and stromatolites of the sea-linked Satonda Crater Lake, Indonesia: A recent model for the Precambrian sea? Chemical Geology 81, 4, p. 299-310.
(First discovery of Recent stromatolites, produced by coccoid cyanobacteria in crater Lake of Satonda Island near Sumbawa. Started to grow 4000 yrs ago. pH (8.45) and calcite saturation higher than in seawater, due to biogenic CO_2 and weathering of volcanic silicates. May provide analogue to Precambrian stromatolite environments)

Kempe, S. & J. Kazmierczak (1993)- Satonda crater lake, Indonesia: hydrogeochemistry and biocarbonates. Facies 28, p. 1-32.
(Recent calcareous structures resembling stromatolites in crater lake of small Satonda island, N of Sumbawa)

Kershaw, A.P., D. Penny, S. van der Kaars, G. Anshari & A. Thamotherampillai (2001)- Vegetation and climate in lowland southeast Asia at the Last Glacial Maximum. In: I. Metcalfe et al. (eds.) Faunal and floral migration and evolution in SE Asia-Australasia. Balkema, Lisse, p. 227-236.
(Pollen records from SE Asia suggest that during Last Glacial Maximum (~18 ka) precipitation was probably lower by ~30-50% than today, and temperature was reduced by as much as 6-7°. Rainforest was replaced by grassland in some areas. Montane forest elements descended to low altitudes. Exposed continental shelves covered largely by rainforest in wetter areas, by grassland and open woodlands in drier areas)

Kershaw, A.P., S. van der Kaars & J.R. Flenley (2011)- The Quaternary history of Far Eastern rainforests. In: M.B. Bush et al. (eds.) Tropical rainforest responses to climatic change, 2nd Ed., Springer-Praxis, Chapter 4, p. 85-123.

(Rel. little overall change in gross Far Eastern rainforest distribution during Quaternary. Palynology studies from several sites across Indonesia suggest ~5-6°C lower temperatures during Last Glacial Maximum. Major impact on Holocene rainforest has been that of people)

Kershaw, P., P.G. Quilty, B. David, S. van Huet & A McMinn (2000)- Palaeobiogeography of the Quaternary of Australasia. Memoir Assoc.Australasian Palaeontologists (AAP) 23, p. 471-516.
(Reconstructions of Quaternary geography and vegetation provinces of Australia- Indonesia)

Koopmans, B.N. (1972)- Sedimentation in the Kelantan delta (Malaysia). Sedimentary Geology 7, 1, p. 65-84.
(Kelantan River (NE Malay Peninsula) flows into S China Sea through two main channels. Mouth of river gradually shifted W under influence of beach drift generated by NE monsoon)

Korus, J.T. & C.R. Fielding (2015)- Asymmetry in Holocene river deltas: patterns, controls, and stratigraphic effects. Earth-Science Reviews 150, p. 219-242.
(Review of sediment distribution patterns in 27 deltas worldwide, incl. Mahakam)

Lanuru, M. & R. Fitri (2008)- Sediment deposition in a South Sulawesi seagrass bed. Marine Res. Indonesia 33, 2, p. 221-224.
(Deposition of suspended sediment in shallow coastal waters colonized by Thallasia-dominated seagrass in Pannikiang Island measured with sediment traps. Amounts of sediment deposition inside seagrass beds significantly higher than in adjacent unvegetated area)

Liu, J.P., D.J. DeMaster, T.T. Nguyen, Y. Saito, V.L. Nguyen, T.K.O. Ta & X. Li (2017)- Stratigraphic formation of the Mekong River Delta and its recent shoreline changes. In: Sedimentation and survival of the Mekong Delta, Oceanography 30, 3, p. 72-83.
(online at: https://tos.org/oceanography/assets/docs/30-3_liu.pdf)
(Mekong River discharges into S China Sea and formed third largest delta plain in world (~50,000 km^2; after Amazon and Ganges-Brahmaputra). Subaerial delta prograded ~220 km SE-ward in last 7500 years, showing 15m thick sigmoidal clinoforms immediately off distributaries. Mekong-derived sediment extends ~300 km along shelf to SW. From 1973- 2005 seaward shoreline growth decreased gradually, due to construction of dams, sand mining, delta subsidence, increasing storms and sea level rise)

Liu, Z., H. Wang, W.S. Hantoro, E. Sathiamurthy, C. Colin, Y. Zhao & J. Li (2012)- Climatic and tectonic controls on chemical weathering in tropical Southeast Asia (Malay Peninsula, Borneo, and Sumatra). Chemical Geology 291, p. 1-12.
(Clay mineralogy and major element geochemistry of 58 surface sediment samples in 27 rivers draining Malay Peninsula, Borneo, and Sumatra. High kaolinite in Malay Peninsula (av. 80%), Sumatra (58-78%), and S Borneo (41-55%), high illite in N Borneo (47-77%), moderate smectite in Sumatra (6-29%). Intensive chemical weathering in all three regions, increasing from N Borneo to S Borneo, and further to Malay Peninsula and Sumatra. Monsoon climate with constant warm temperature and abundant precipitation principal forcing factor on chemical weathering)

Lyu, H., T. Watanabe, Y. Ota, A. Hartono, M. Anda, R.A. Dahlgren & S. Funakawa (2022)- Climatic controls on soil clay mineral distributions in humid volcanic regions of Sumatra and Java, Indonesia. Geoderma 425, 116058, p. 1-13.
(Climate and parent material primary factors determining distributions of soil clay minerals. In Sumatra-Java large variations in climate (T, precipitation/ intensity of dry season) and parent material (rhyolitic-to-basaltic tephra).High Fe(hydr) oxide in soils derived from mafic materials. Occurrence of mica, altered to hydroxy-Al interlayered vermiculite, under continuous leaching conditions in soils from felsic materials)

Mann, T., A. Rovere, T. Schoene, A. Klicpera, P. Stocchi, M. Lukman & H. Westphal (2016)- The magnitude of a mid-Holocene sea-level highstand in the Strait of Makassar. Geomorphology 257, p. 155-163.

(Literature suggests two relative sea-level highstands over last 6000 years, with magnitudes >2m, but emergent fossil microatolls on Pulau Panambungan, Spermonde Shelf, indicate relative sea-level highstand not >0.5 m above present at ~5600 yr BP. Highstand followed by rapid sea-level fall to present level at ~4000 cal. yr BP)

Milliman, J.D. (1995)- Sediment discharge to the ocean from small mountainous rivers: the New Guinea example. Geo-Marine Letters 15, p. 127-133.
(Small mountainous rivers draining island of New Guinea discharge approximately 1.7 × 109 t of sediment annually, about same as combined loads of rivers draining N America)

Milliman, J.D., K.L. Farnsworth & C.S. Albertin (1999)- Flux and fate of fluvial sediments leaving large islands in the East Indies. J. of Sea Research 41, 1-2, p. 97-107.
(Rivers on Sumatra, Java, Borneo, Sulawesi, Timor and New Guinea relatively high sediment discharge. These six islands only 2% of land area draining into global ocean, but responsible for 20-25% of sediment export)

Minoura, K., F. Imamura, T. Takahashi & N. Shuto (1997)- Sequence of sedimentation processes caused by the 1992 Flores tsunami: Evidence from Babi Island. Geology (GSA) 25, 6, p. 523-526.
(1992 Flores tsunami caused widespread deposition of coarse and well-sorted marine carbonate sand with molluscan shells sand on N and SSW shores of Babi Island)

Molengraaff, G.A.F. (1930)- The recent sediments in the seas of the East Indian Archipelago with a short discussion of those seas in former geological periods. Proc. Fourth Pacific Science Congress, Java 1929, IIA, p. 989-1021.

Molnar, P. & T.W. Cronin (2015)-- Growth of the Maritime Continent and its possible contribution to recurring Ice Ages. Paleoceanography and Paleoclimatology (AGU) 30, 3, p. 196-225.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1002/2014PA002752)
(Areal extent of the 'Maritime Continent' (= islands of Indonesia and surrounding region) has grown by ~60% since 5 Ma, which may have altered global climate in two ways: (1) heavier rainfall over islands and (2) increased area of weathering of basaltic rock under warm, moist conditions extracts more CO_2 from atmosphere, possibly lowering global temperatures by 0.25°C)

Morley, R.J. & H. Morley (2021)- The prelude to the Holocene: tropical Asia during the Pleistocene. In: N. Kumaran & D. Padmalal (eds.) Holocene Climate Change and Environment, Elsevier, Chapter 1, p. 1-32.
(Review of Quaternary climate in India and SE Asia. SE Asian rainforest flora largely derived from India, as it collided with Asia in Eocene, and many elements of Southeast Asia's fauna dispersed from India during late Neogene. For last and penultimate glacial periods, increasing evidence for seasonally dry conditions in different parts of Sundaland. Etc.).

Morley, R., H. Morley & T. Swiecicki (2017)- Mio-Pliocene history of deltas, rivers and uplands across Sunda, as revealed by sequence biostratigraphy. Proc. Asia Petroleum Geoscience Conference and Exhibition (APGCE 2017), EAGE, Kuala Lumpur, 43699, p. 203-207. *(Extended Abstract)*

Nguyen, V.L., T.K.O. Ta & M. Tateishi (2000)- Late Holocene depositional environments and coastal evolution of the Mekong River Delta, Southern Vietnam. J. Asian Earth Sciences 18, 4, p. 427-439.
(Mekong River Delta is tide-dominated delta, with mainly fine grained sediments. At 6000- 5000 yr BP Holocene transgression created Late Pleistocene terrace in N parts of delta and marine erosion at 4.5 and 2.5m above present sea level. Over last 4550 yrs fast progradation produced delta plain of 62,520 km^2)

Nienhuis, J.H., A.D. Ashton & L. Giosan (2015)- What makes a delta wave-dominated? Geology. 43, 6, p. 511-514.
(Morphology of deltas largely determined by balance between river inputs and ability of waves to spread sediments along coast. 'Fluvial dominance ratio' tested on 25 deltas on N shore of Java)

Nomosatryo, S., R. Tjallingii, A.M. Schleiche, P. Boli, C. Henny, D. Wagner & J. Kallmeyer (2021)- Geochemical characteristics of sediment in tropical Lake Sentani, Indonesia, Are influenced by spatial differences in catchment geology and water column stratification. Frontiers in Earth Science 9, 671642, p. 1-16.
(online at: https://www.frontiersin.org/articles/10.3389/feart.2021.671642/full)
(Lake Sentani near Jayapura, NE Papua, composed of four interconnected sub-basins. At least 16 rivers drain into lake. Sediment compositionis mostly controlled by catchment geology)

Novico, F., D. Menier, M. Mathew, M. Ramkumar, M. Santosh, C. Endyana, K.T. Dewi, I. Kurniawan et al. (2022)- Impact of Late Quaternary climatic fluctuations on coastal systems: Evidence from high-resolution geophysical, sedimentological and geochronological data from the Java Island. Marine and Petroleum Geology 136, 105399, p.
(manuscript online at: https://archimer.ifremer.fr/doc/00865/97716/106921.pdf)
(On morphology and Late Quaternary post-glacial sedimentary fill of submerged Last Glacial Maximum incised lowstand valleys in Jakarta Bay, along north coast of Java' Max. depths ~30-40m. Etc.)

Nummedal, D., F.H. Sidi & H.W. Posamentier (2003)- A framework for deltas in Southeast Asia. In: F.H. Sidi et al. (eds.) Tropical deltas of Southeast Asia; sedimentology, stratigraphy, and petroleum geology, Soc. Sedimentary Geology (SEPM), Special Publ. 76, p. 5-17.

Page, S.E. & A. Hooijer (2016)- In the line of fire: the peatlands of Southeast Asia. Philosophical Transactions Royal Society London, B 371, 1696, p. 1-9.
(online at: http://rstb.royalsocietypublishing.org/content/royptb/371/1696/20150176.full.pdf)

Page, S.E., J.O. Rieley & R. Wust (2006)- Lowland tropical peatlands of Southeast Asia. In: I.P. Martini et al. (eds.) Peatlands; evolution and records of environmental and climate changes, Elsevier, Developments in Earth Surface Processes 9, p. 145-172.
(online at: https://www.researchgate.net/profile/Raphael-Wuest/publication/238501608_Chapter_7_Lowland_tropical_peatlands_of_Southeast_Asia)
(Tropical peatlands in SE Asia all in low altitudes where rain forest vegetation grows on thick mass of organic matter accumulated over 1000s or 10,000s of years, to form deposits up to 20 m thick. Lowland ombrogenous peatlands support peat swamp forest; freshwater swamp forests associated with geogenous peatlands. Etc.)

Palinkas, C.M., C.A. Nittrouer & J.P. Walsh (2006)- Inner-shelf sedimentation in the Gulf of Papua, New Guinea: a mud-rich shallow shelf setting. J. Coastal Research 22, 4, p. 760-772.
(online at: https://www.researchgate.net/publication/254948352_Inner-Shelf_Sedimentation_in_the_Gulf_of_Papua Etc.)
(Gulf of Papua: (1) the large supply of fine-grained sediment, accumulating at significant rates on inner shelf; (2) quiescent monsoon conditions probably aid sediment retention on inner shelf; and (3) coalescence of supply from multiple river sources causes maximum accumulation rates to occur in central Gulf of Papua)

Paris, R., F. Lavigne, P. Wassmer & J. Sartohadi (2007)- Coastal sedimentation associated with the December 26, 2004 tsunami in Lhok Nga, west Banda Aceh (Sumatra, Indonesia). Marine Geology 238, p. 93-106.
(Case study for interpretation of coastal sedimentation associated with large tsunamis)

Parker, G., T. Muto, Y. Akamatsu, W.E. Dietrich & J.W. Lauer (2008)- Unravelling the conundrum of river response to rising sea-level from laboratory to field. Part II. The Fly-Strickland River system, Papua New Guinea. Sedimentology 55, 6, p. 1657-1686.
(Most recent deglaciation resulted in global sea-level rise of ~120 m over 12 000 years. Numerical model is developed to predict response of rivers to this rise)

Payenberg, T.H.D., S.C. Lang & B. Wibowo (2003)- Discriminating fluvial from deltaic channels- examples from Indonesia. Proc. 29th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, 1, p. 1-16.
(Fluvial channel reservoirs most commonly meander pointbars or braided sheets. Deltaic distributary channel reservoirs typically elongate sandy channel sidebars attached to straight channel walls. Deltaic distributary

channels usually thinner and shallower than fluvial channel belts, and not thicker than their depositional mouthbars. Width-thickness ratios for fluvial distributary channel reservoirs average 50:1, meandering fluvial channel reservoirs have width-thickness ratios typically >100:1, braided river reservoirs 500:1 or higher)

Pilarczyk, J.E., T. Dura, B.P. Horton, S.E. Engelhart, A.C. Kemp, Y. Sawai (2014)- Microfossils from coastal environments as indicators of paleo-earthquakes, tsunamis and storms. Palaeogeogr. Palaeoclim. Palaeoecology 413, p. 144-157.
(Discussion of storm- and tsunami-related transport, with examples from Thailand, Malaysia, etc. Paleotsunami deposits commonly recognized as anomalous sand sheets that were washed into marsh or lake sediments. Marine microfossils often dominate tsunami overwash deposits because of landward transport and deposition of scoured marine sediment. Nearshore benthic foraminifera (Ammobaculites spp., Ammonia, etc.) may also be entrained by tsunami run-up and subsequently transported seaward by backwash, where they end up as allochthonous assemblages in low-energy submarine sediments)

Prentice, M.L. & S. Glidden (2010)- Glacier crippling and the rise of the snowline in western New Guinea (Papua Province, Indonesia) from 1972 to 2000. In: S.G. Haberle et al. (eds.) Altered ecologies: fire, climate and human influence on terrestrial landscapes, ANU Press, p. 457-472.
(From 1936 to 2006, the area of the Meren/Carstensz glacial system of W Papua decreased by 78%)

Prentice, M.L., G.S. Hope, K. Maryunani & J.A. Peterson (2005)- An evaluation of snowline data across New Guinea during the last major glaciation, and area-based glacier snowlines in the Mt. Jaya region of Papua, Indonesia, during the last glacial maximum. In: S.P. Harrison (ed.) Snowlines at the last glacial maximum and tropical cooling, Quaternary International 138-139, p. 93-117.
(Data from Puncak Jaya show Last Glacial Maximum glaciation less extensive than previously thought)

Proske, U., T.J.J. Hanebuth, H. Behling, V.L. Nguyen, T.K.O. Ta & B.P. Diem (2010)- The palaeoenvironmental development of the northeastern Vietnamese Mekong River Delta since the mid Holocene. The Holocene 20, 8, p. 1257-1268.
(online at: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.918.2627&rep=rep1&type=pdf)
(During the mid-Holocene when sea level was between ~2.5-4.5 m above present level, broad mangrove belts (Rhizophora pollen, Avicennia, Sonneratia, Bruguiera, etc.) along numerous coasts of Sunda and Sahul shelves. With subsequent seaward migrating shoreline gradually replacement by back-mangroves)

Proske, U., T.J.J Hanebuth, J. Groger & B.P. Diem (2011)- Late Holocene sedimentary and environmental development of the northern Mekong River Delta, Vietnam. Quaternary International 230, p. 57-66.
(Sedimentological and palynological study of sediment cores from N Mekong River Delta show delta development since M-Holocene sea level highstand. M Holocene Sub- to intertidal flat deposit followed by late Holocene regression and delta progradation)

Raes, N., C.H. Cannon, R.J. Hijmans, T. Piessens, L.G. Saw, P.C. van Welzen & J.W.F. Slik-(2014)- Historical distribution of Sundaland's Dipterocarp rainforests at Quaternary glacial maxima. Proc. National Academy of Sciences USA (PNAS) 111, 47, p. 16790-16795.
(online at: https://www.pnas.org/doi/pdf/10.1073/pnas.1403053111)
(On extent of Dipterocarp rainforests on emergent Sundaland in SE Asia during Quaternary glaciations. Dipterocarp trees dominate rainforests of Sundaland, and their distributions serve as proxy for rainforest extent. Climate of C Sundaland during Last Glacial Maximum (LGM) suitable to sustain Dipterocarp rainforest, and presence of previously suggested transequatorial savannah corridor at that time unlikely)

Ranawijaya, D., Y. Noviadi, E. Usman, N. Kristanto, N. Sutisna, J. Widodo & Wardhana (2000)- Progradation-retrogradation of Mahakam Delta since Last Glacial Maximum and Holocene. Proc. 29th Annual Conv. Indonesian Association Geologists (IAGI), Bandung, 4, p. 137-148.

Ranawijaya, D., E. Usman, Y. Noviadi & K.T.D. Susilohadi (2004)- Paleoclimatology and sea-level changes of Mahakam Delta, East Kalimantan, interpreted from integrated geological and geophysical data. Proc. 41st CCOP Annual Session, Tsukuba, p. 35-44.
(online at: www.ccop.or.th/download/pub/41as_ii.pdf#page=31)
(Late Quaternary seismic/sedimentary record interpreted in terms of the climatic events, from Last interglacial maximum, (120 ka BP) but mainly since the Last Glacial Maximum (18 ka BP) and onset of Recent Interglaciation at 5 ka)

Rant, A. (1929)- De Javaansche gebergteflora als bewijs van een vroegere verbinding van Java met het vasteland van Azie. Natuurkundig Tijdschrift voor Nederlandsch-Indie 89, 3, p. 1-28.
('The Javanese mountain flora as proof of former connection of Java and the mainland of Asia'. Many of the present-day mountain flora species of Java also known from mainland Asia, suggesting areas were formerly connected (also supported by distribution of fresh water fish, etc.))

Ray, R.D., G.D. Egbert & S.Y. Erofeeva (2005)- A brief overview of tides in the Indonesian seas. Oceanography 18, 4, p. 74-79.

Reich, S. (2014)- Seagrass mollusks as a model group for paleoecological and paleodiversity studies. Doct. Thesis University of Utrecht, Utrecht Studies in Earth Sciences 57, p. 1-495.
(online at: https://dspace.library.uu.nl/bitstream/1874/294598/2/reich.pdf)
(Includes Section on Mollusk assemblages from the Miocene of Indonesia (South Central Java, East Kalimantan), p. 65-243 (reprint of 2 papers published elsewhere))

Reich, S., E. Di Martino, J.A. Todd, F.P. Wesselingh & W. Renema (2015)- Indirect paleo-seagrass indicators (IPSIs): a review. Earth-Science Reviews 143, p. 161-186.
(online at: https://repository.naturalis.nl/pub/801379/Reich-2015-Indirect-paleo-seagrass-indicators-A.pdf)
(Review of modern and fossil faunas associated with seagrass meadows in Late Cretaceous and Cenozoic warm, shallow marine deposits. Most examples from Recent and Miocene of Indonesia. Many foraminifera and other organisms generally associated with seagrasses not necessarily confined to seagrass substrates)

Richardson, J.E., C. Costion & A. Muellner-Riehl (2012)- The Malesian floristic interchange: plant migration patterns across Wallace's Line. In: D.J. Gower et al. (eds.) Biotic evolution and environmental change in Southeast Asia, The Systematics Association, Cambridge University Press, Chapter 6, p. 138-163.
(online at: https://www.researchgate.net/publication/269060852_The_Malesian_floristic_interchange_plant_migration_patterns_across_Wallace's_Line)
(Discussion of migrations of 'Sundanian' floral elements to Australasian land masses and vice versa. Wallace Line not a sharp floristic dividing line today, but a significant barrier (Kalkman, 1955). Greater plant migration across Wallace's Line from W to E than E to W. A significant percentage of Australia's northern tropical flora derived from SE Asia. Etc.)

Richmond, B.M., B.E. Jaffe, G. Gelfenbaum & R.A. Morton (2006)- Geologic impacts of the 2004 Indian Ocean tsunami on Indonesia, Sri Lanka, and the Maldives. Zeitschrift fur Geomorphologie, N.F., Supplement 146, p. 235-251.
(December 26,2004 tsunami deposits generally characterized as relatively thin sheets (<80cm), mostly of sand)

Rimbaman, I. (1992)- The role of sea-level changes on the coastal environment of northern West Java (case study of Eretan, Losarang and Indramayu). J. Southeast Asian Earth Sciences 7, 1, p. 71-77.
(Quaternary geology of north coastal palain near Indramayu, W Java)

Rizal, Y., Aswan, Y. Zaim, W.D. Santoso, N. Rochim, Daryono, S.D. Anugrah, Wijayanto, I. Gunawan et al. (2017)- Tsunami evidence in South Coast Java, case study: tsunami deposit along South coast of Cilacap. Proc. 2nd International Conference Transdisciplinary research on environmental problems in Southeast Asia (TREPSEA), Bandung 2016, IOP Conference Series: Earth and Environmental Science, 71, 012001, p. 1-12.
(online at: http://iopscience.iop.org/article/10.1088/1755-1315/71/1/012001/pdf)

(Three paleo-tsunami deposits identifid along Cilacap coast of S Java. dated and tied to earthquakes of 1883, 1982 and 2006. Three more older layers. Paleo-tsunami layer characterized by light sands on top of paleo-soil, with common mud clasts and marine benthic foraminifera)

Roberts, H.H. (1987)- Modern carbonate-siliciclastic transitions: humid and arid tropical examples. Sedimentary Geology 50, p. 25-65.
(Includes discussion of shallow southern Sunda Shelf/ Java Sea environments. Remnants of Pleistocene drainage channels still detectable on present sea floor. Java Sea modern carbonate buildups strong E-W orientation, response to dominant current directions triggered by monsoonal wind directions. Westerly monsoon brings large quantities of suspended terrigenous sediment to Sunda Shelf; easterly monsoon drives higher salinity water (33-35 ppt) into region from Banda Sea. Java Sea sediments mainly terrigenous muds derived from weathered volcanics (Sumatra and Java) and other crystalline rocks from Kalimantan, but with significant areas of carbonate sedimentation and reef development (Pulau Seribu, East Sunda Shelf margin))

Rodysill, J.R., J.M. Russell, S. Bijaksana, E.T. Brown, L.O. Safiuddin & H. Eggermont (2012)- A paleolimnological record of rainfall and drought from East Java, Indonesia during the last 1,400 years. J. Paleolimnology 47, 1, p. 125-139.
(Organic matter δ13C data from 6.8m core in Lake Logung, E Java indicate E Java became wetter over last millennium until ~1800 Common Era, consistent with evidence for S-ward migration of Intertropical Convergence Zone at this time. Century-scale hydrologic variability relates to changes in Walker Circulation)

Russell, J.M., S. Bijaksana, H. Vogel,M. Melles, J. Kallmeyer, D. Ariztegui, S. Crowe, S. Fajar et al. (2016)- The Towuti Drilling Project: paleoenvironments, biological evolution, and geomicrobiology of a tropical Pacific lake. Scientific Drilling 21, p. 29-40.
(online at: https://core.ac.uk/download/pdf/44741514.pdf)
(Drilling of lacustrine fill of Lake Towuti in S Sulawesi by Towuti Drilling Project in 2015, to study long-term environmental and climatic change in tropical W Pacific region. One of oldest lakes in Indonesia (since ~1.5 Ma). Water depths 156-200 m. Clear indications of orbital-scale climate variability during M-L Pleistocene)

Russell, J.M., H. Vogel, B.L. Konecky, S. Bijaksana, Y. Huang, M. Melles, N. Wattrus, K. Costa & J.W. King (2014)- Glacial forcing of central Indonesian hydroclimate since 60,000 y B.P. Proc. National Academy of Sciences USA (PNAS) 111, 14, p. 5100-5105.
(online at: www.pnas.org/content/111/14/5100.full.pdf)
(Terrestrial sedimentary record of surface hydrology and vegetation in Indonesia in the last 60,000 yr, based on geochemical data from Lake Towuti, Sulawesi. Wet conditions and rainforest ecosystems present during Holocene and during Marine Isotope Stage 3, alternating with severe drying between ~33,000 and 16,000 yr B.P., when high-latitude ice sheets expanded and global temperatures cooled)

Ruttner, F. (1931)- Hydrographische und hydrochemische Beobachtungen auf Java, Sumatra und Bali. Archiv Hydrobiologie, Supplement Volume 8, p. 1-454.

Ruwaimana, M., G.Z. Anshari, L.C. R. Silva & D.G. Gavin (2020)- The oldest extant tropical peatland in the world: a major carbon reservoir for at least 47 000 years. Environmental Research Letters (IOP), 15, 11, p. 1-10.
(online at: https://iopscience.iop.org/article/10.1088/1748-9326/abb853/pdf)
(Upper Kapuas Basin in NW Kalimantan shosw inland peat formation since at least 47.8 ka. Synthesis of peat basal dates across Borneo, which showshiatus in peat genesis during cool and dry period from 30 to 20 ka)

Salahuddin (2011)- The relic fluvial-dominated morphology of Mahakam Delta. Berita Sedimentologi 21, FOSI- IAGI, p. 5-8.
(online at: https://journal.iagi.or.id/index.php/FOSI/article/download/206/176)
(Mahakam Delta fluvial-dominated morphology not result of present-day processes, but reflects past phase of fluvial-dominant progradation before present-day subsidence and transgression)

Salahuddin & J.J. Lambiase (2013)- Sediment dynamics and depositional systems of the Mahakam Delta, Indonesia: ongoing delta abandonment on a tide-dominated coast. Journal of Sedimentary Research 83, p. 503-521.
(Mahakam Delta presently subsiding and being transgressed and modified by marine processes. Most or all, fluvially-derived sand stored onshore in distributaries, whilst finer-grained sediment moves offshore. Marine benthic organisms inhabit distributaries up to 20 km landward from shoreline. Facies distribution is better indicator of modern depositional processes than delta morphology)

Setyobudi, P.T., P.A. Suandhi, Z.L. Tarigan, A. Bachtiar, A.G.R. Jayanti & L. Budin (2016)- Sedimentology and limnology of Singkarak and Toba Lakes, Sumatra, Indonesia: depositional and petroleum system model for tropical fluvio-lacustrine and volcanic related rift basins in Southeast Asia. Proc. 40th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, IPA16-660-G, p. 1-21.

Sevastjanova, I., R. Hall & D.H.M. Alderton (2012)- A detrital heavy mineral viewpoint on sediment provenance and tropical weathering in SE Asia. Sedimentary Geology 280, p. 179-194.
(Heavy mineral study of river sand samples from Malay Peninsula and Sumatra. Malay Peninsula granitic and contact metamorphic provenance (zircon, tourmaline, hornblende, andalusite, epidote, monazite, rutile and titanite, etc.). Sumatra two main sources: (1) modern volcanic arc (pyroxene, particularly hypersthene), and (2) basement. Zircon, apatite, hornblende, epidote, and olivine also common and likely of mixed provenance. Heavy mineral assemblages of Malay Peninsula and Sumatra modern rivers different from Cenozoic sediments, suggesting rapid source unroofing)

Shearman, P., J. Bryan & J.P. Walsh (2013)- Trends in deltaic change over three decades in the Asia-Pacific region. J. Coastal Research 29, 5, p. 1169-1183.
(Analysis of recent changes of five major mangrove deltaic systems in Asia-Pacific region: Fly and Kikori-Purari, Ganges-Brahmaputra, Irrawaddyand Mekong. Overall net contraction in mangrove areas)

Sidi, F.H., D. Nummedal, P. Imbert, H. Darman & H.W. Posamentier (eds.) (2003)- Tropical deltas of Southeast Asia- sedimentology, stratigraphy and petroleum geology. Society for Sedimentary Geology (SEPM) Special Publ. 76, p. 1-269.

Sihombing, E.H., N. Oetary, I. Fardiansyah, R. Waren, E. Finaldhi, F. Fitris et al. (2016)- Modern fluvio-lacustrine system of Lake Singkarak, West Sumatra and its application as an analogue for Upper Red Bed Fm in the Central Sumatra Basin. Berita Sedimentologi 36, p. 9-33.
(online at: www.iagi.or.id/fosi/berita-sedimentologi-no-36.html)
(Modern sediments of Sumpur axial-fluvial delta and Malalo alluvial fan delta in N part of Lake Singkarak, and comparison to Paleogene rift-fill of C Sumatra Basin)

Situmorang, M., D. Ilahude, T. Kuntoro, D. Kusnida & D. Arifin (1993)- Core lithology and Quaternary sedimentation in Masalembo-Bawean waters, Eastern Java Sea. Proc. 22nd Annual Conv. Indonesian Association Geologists (IAGI), Bandung, 2, p. 1003-1014.
(online at: https://www.iagi.or.id/web/digital/53/22nd-Volume-2-(6-9-Des-1993)-401-412.pdf)
(Marine geology of area in E Java Sea around Masalembo, between SE Kalimantan and Madura. Water depth 22-85m, deepest north. Includes seafloor area with peat and black clay ('lowstand' coastal marsh))

Situmorang, M., Koesnadi H., Yudicara & Y. Noviandi (2000)- Seafloor surficial geology and mineral resources around Karimata waters, West Kalimantan. Proc. 29th Annual Conv. Indonesian Association Geologists (IAGI), Bandung, 2, p. 87-98.

Slingerland, R., R.W. Selover, A.S. Ogston, T.R. Keen, N.W. Driscoll, and J.D. Milliman (2008)- Building the Holocene clinothem in the Gulf of Papua: an ocean circulation study. J. of Geophysical Research 113, F01S14, p. 1-17.
(On role of tidal and wind-driven flows and buoyant river plumes in development of Holocene clinoform in Gulf of Papua. Tidal flows on modern clinoform are strong and are landward and seaward directed.

Soegiarto, A. (1992)- The role of the Southeast Asian Seas in regional and global climate change. Global Change 22, p. 32-37.

Soeriaatmadja, R.E. (1957)- The coastal current south of Java. Penjelidikan Laut di Indonesia (Marine Research in Indonesia) 3, p. 41-55.

Solihuddin, T., D.A. Utami, H.L. Salim & J. Prihantono (2019)- Sedimentary environment of a modern carbonate platform of Karimunjawa Islands, Central Java. Indonesian J. on Geoscience (IJOG), 6, 1, p. 57–72.
(online at: https://ijog.geologi.esdm.go.id/index.php/IJOG/article/view/448/278)
(Satellite interpretation and sedimentology of fringing reefs around Karimunjawa islands, Java Sea. Coral contributes to carbonate sands and gravels, along with molluscs, foraminifera (Homotrema, Calcarina), Halimeda and red algae)

Stevenson, J. (2018)- Vegetation and climate of the Last Glacial Maximum in Sulawesi. In: S. O'Connor et al. (eds.) The Archaeology of Sulawesi: Current Research on the Pleistocene to the Historic period, Terra Australis 48, Australian National University Press, Canberra, p. 17-29.
(online at: https://press-files.anu.edu.au/downloads/press/n4569/pdf/book.pdf)
(Geochemical and paleovegetation records from last 60,000 years in cores from Lake Towuti suggest climate during Last Glacial Maximum (~20 ka) was extremely dry and more seasonal than today, and bracketed by much wetter conditions of Marine Isotope Stage 3 and the Holocene)

Stuart, K.L. (2018)- Discovery of possible paleotsunami deposits in Pangandaran and Adipala, Java, Indonesia using grain size, XRD, and 14C Analyses. M.Sc. Thesis Brigham Young University, Provo, Utah, Theses and Dissertations 6719, p. 1-67.
(online at: https://scholarsarchive.byu.edu/etd/6719/)
(Fining-upward grain size trends, interbedded sand and mud and trends in heavy mineral abundances are among the characteristics used for Quaternary tsunami deposit identification along S coast of Java).

Sukawati, E., H. Amijaya & E. Yulianto (2009)- Sedimentology of December 2004 and March 2005 tsunami deposit at Busung Bay, Simeulue Island, Sumatra. Proc. 38th Annual Conv. Exh. Indonesian Association Geologists (IAGI), Semarang, p. 1-7.
(Tsunami deposits from Aceh earthquake of 26 December 2004 and Nias earthquake on March 2005. In 2004 tsunami sediments basal rip-up clasts and 6 (9?) fining-upward patterns and 6 coarsening upward patterns; in 2005 tsunami sediment only 1 fining upward pattern. With foraminifera assemblages from inner shelf (2004 and 2005) and middle shelf (2004 only))

Sumner, E.J., M.I. Siti, C. McNeill, P.J. Talling, T.J. Henstock, R.B. Wynn, Y.S. Djajadihardja & H. Permana (2013)- Can turbidites be used to reconstruct a paleoearthquake record for the central Sumatran margin? Geology 41, 7, p. 763-766.
(Sumatra has well-characterized earthquake record spanning past 200 yr, but sediment cores from Sumatran margin reveal few turbidites emplaced in past 100-150 yrs. No evidence of turbidites that correlate with large 2004 and 2005 earthquakes, suggesting not all large earthquakes generate widespread turbidites (Comment by Goldfinger et al. 2014 suggests absence of turbitides possibly because cores not in right locations))

Syahrir, M.R., T. Hanjoko, A. Adnan, M. Yasser, M. Efendi, A.A. Budiarsa & I. Suyatna (2018)- The existence of estuarine coral reef at eastern front of Mahakam Delta, East Kalimantan, Indonesia, a first record. AACL Bioflux, Int. J. of the Bioflux Society 11, 2, p. 362-378.
(online at: http://www.bioflux.com.ro/docs/2018.362-378.pdf)
(Coral reef at NE front of Mahakam Delta with 30 genera of hard coral and 11 genera of soft coral)

Szczucinski, W. (2012)- The post-depositional changes of the onshore 2004 tsunami deposits on the Andaman Sea coast of Thailand. Natural Hazards 60, 1, p. 115-133.
(online at: https://link.springer.com/article/10.1007/s11069-011-9956-8)

(2004 Indian Ocean tsunami flooded Andaman Sea coastal zone, leaving few mm to 10's of cm thick deposits over ~1 km-wide inundation zone. After 4 years tsunami deposits preserved at only half of studied sites)

Ta, T.K.O., V.L. Nguyen, M. Tateishi, I. Kobayashi & Y. Saito (2001)- Sedimentary facies, diatom and foraminifer assemblages in a late Pleistocene-Holocene incised-valley sequence from the Mekong River Delta, Bentre Province, Southern Vietnam: the BT2 core. J. Asian Earth Sciences 20, 1, p. 83-94.
(71m long core in incised vally fill shows post-glacial transgressive -regressive fill cycle. Maximum Holocene marine influence at ~5300 yr BP, with bay/estuary muds with common planktonic diatoms (Coscinodicus, Thalassionema, etc.) and open marine foraminifera (Bolivina, Bulimina, Quinqueloculina, Pararotalia). Regressive succession from prodelta- delta front (4000-3000 yr BP) to delta plain)

Ta, T.K.O., V.L. Nguyen, M. Tateishi, I. Kobayashi, Y. Saito & T. Nakamura (2002)- Sediment facies and Late Holocene progradation of the Mekong River Delta in Bentre Province, southern Vietnam: an example of evolution from a tide-dominated to a tide- and wave-dominated delta. Sedimentary Geology 152, p. 313-325.

Ta, T.K.O., V.L. Nguyen, M. Tateishi, I. Kobayashi, S. Tanabe & Y. Saito (2002)- Holocene delta evolution and sediment discharge of the Mekong River, southern Vietnam. Quaternary Science Reviews 21, p. 1807-1819.
(Last 3000 yr of Mekong delta evolution characterized by progradation with increasing wave influence, SE-ward sediment dispersal, decreasing progradation rates, beach-ridge formation and delta front face steepening)

Ta, T.K.O., V.L. Nguyen, M. Tateishi, I. Kobayashi & Y. Saito (2005)- Holocene delta evolution and depositional models of the Mekong River Delta, Southern Vietnam. In: L. Giosan & J.P. Bhattacharya (eds.) River deltas- concepts, models, and examples, Soc. Sedimentary Geology (SEPM) Special Publ. 83, p. 453-466.

Ta, T.K.O., V.L. Nguyen, M. Tateishi, I. Kobayashi, Y. Saito & T. Nakamura (2002)- Sediment facies and Late Holocene progradation of the Mekong River Delta in Bentre Province, southern Vietnam: an example of evolution from a tide-dominated to a tide- and wave-dominated delta. Sedimentary Geology 152, p. 313-325.
(Mekong Delta is mixed tide and wave energy delta with wide delta plain formed during last 6 ka and is one of largest deltas in world. Changed from tide-dominated to tide-wave-dominated during Late Holocene. Late Pleistocene Paleo-Mekong River incised valley >70 m deep and formed during last glacial period)

Tamuntuan, G., S. Bijaksana, J. King, J. Russell, U. Fauzi, K. Maryunani, N. Aufa & L.O. Safiuddin (2015)- Variation of magnetic properties in sediments from Lake Towuti, Indonesia, and its paleoclimatic significance. Palaeogeogr. Palaeoclim. Palaeoecology 420, p. 163-172.
(Sediment core from Lake Towuti in E Sulawesi Ophiolite belt with three zones of varying magnetic properties, corresponding to levels of iron oxide dissolution and magnetite precipitation. Magnetically strongest zone weak iron oxide dissolution and intense magnetite precipitation, likely driven by lake conditions during dry conditions in Marine Isotope Stage 2)

Tamura, T., Y. Saito, V.L. Nguyen, T.K.O. Ta, M.D. Bateman, D. Matsumoto & S. Yamashita (2012)- Origin and evolution of interdistributary delta plains; insights from Mekong River delta. Geology (GSA) 40, 4, p. 303-306.
(Mekong River delta characterized by several shore-perpendicular elongate delta plains, with sequences of beach ridges, reflecting progradation in last 3.5 ka))

Tamura, T., Y. Saito, S. Sieng, B. Ben, M. Kong, I. Sim, S. Choup & F. Akiba (2009)- Initiation of the Mekong River delta at 8 ka: evidence from the sedimentary succession in the Cambodian lowland. Quaternary Science Reviews 28, 3-4, p. 327-344.
(Most modern deltas initiated around 7.5-9 ka, in response to deceleration of Holocene sea-level rise. Initial stage of Mekong River delta recorded in Cambodian lowland sediment cores: (1) aggrading flood plain and tidal-fluvial channels during postglacial sea-level rise (10- 8.4 ka); (2) aggrading to prograding tidal flats and mangrove forests around maximum flooding of sea (~8.0 ka); (3) prograding fluvial system on delta plain (6.3

ka- Present). Delta progradation initiated as result of sea-level stillstand at around 8-7.5 ka. Thick mangrove peat accumulation from ~7.5- 6.3 ka. Since 6.3 ka fluvial system and delta progradation)

Tan, K.H. (2008)- Soils in the humid tropics and monsoon region of Indonesia. CRC Press, Boca Raton, FL, p. 1-557.

Tan, K.H. & J. van Schuylenborg (1961)- On the classification and genesis of soils developed over acid volcanic material under humid tropical conditions II. Netherlands J. Agricultural Science, Wageningen, 9, 1, p. 41-54.
(online at: https://library.wur.nl/ojs/index.php/njas/article/view/17634/17048)
(Review of soil development in N and E Sumatra on acid volcanic (rhyolitic and dacitic) tuffs. Four belts, mainly following altitude: podzols at 1500-2000 m, podzol-brown podzolic iniergrades at 1100-1500 m, brown podzolic soils at 1100-500 m, red-yellow podzolic soils at 500 m and less)

Tanabe, S., T.K.O. Ta, V.L. Nguyen, M. Tateishi, I. Kobayashi & Y. Saito (2003)- Delta evolution model inferred from the Holocene Mekong Delta, southern Vietnam. In: F.H. Sidi et al. (eds.) Tropical deltas of Southeast Asia, Soc. Sedimentary Geology (SEPM), Special Publ. 76, p. 175-188.
(Mekong Delta at SE tip of Indochina Peninsula with large delta plain ranked third largest in world. Present delta classified as tide-dominated/ wave-influenced. Delta evolved from tide-dominated from 6.5- 2.5 ka to tide-wave mixed delta from 2.5 ka- Present. Wave energy will become more pronounced as delta continues to prograde towards shelf margins)

Thomas, R.B. & E.J. Lesleighter (1983)- Sediment transport and deposition in the Cimanuk Delta region, Indonesia. In: Sixth Australian Conference Coastal and Ocean Engineering, Australian Institute Engin., National Committee on Coastal and Oceanic Engineering, Barton, Australia, p. 139-144
(Many rivers in volcanic areas of Java discharge huge quantities of sediment, forming actively growing deltas like Cimanuk, 170 km E of Jakarta)

Tomascik, T., A.J. Mah, A. Nontiji & M. Moosa (1997)- The ecology of the Indonesian Seas, Part I. The ecology of Indonesia 7, Periplus Ed., Singapore, p. 1-642.
(Extensive overview of Indonesian seas, with chapters on geology, oceanography and coral reefs)

Tomascik, T., A.J. Mah, A. Nontiji & M. Moosa (1997)- The ecology of the Indonesian Seas, Part II. The ecology of Indonesia Series 8, Periplus Editions, Singapore, p. 643-1388.
(Continuation of overview of Indonesian seas, with additional chapters coral reefs, pelagic systems, mangroves and environmental issues)

Triana, K., T. Solihuddin, S. Husrin, J. Risandi, E. Mustikasari, T.L. Kepel, H. L. Salim et al. (2023)- An integrated satellite characterization and hydrodynamic study in assessing coastal dynamics in Cirebon, West Java. Regional Studies in Marine Science 65, 103107, p.
(preprint online at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4178972)

Umbgrove, J.H.F. (1930)- The amount of maximal lowering of sea level in the Pleistocene. Proc. 4th Pacific Science Congress, Java 1929, IIA, p. 105-113.
(Submarine topography of Sunda Shelf in S China Sea, Java Sea and Straits of Malacca indicate Pleistocene rivers debouched near 100m isobath, suggesting about 100m of maximum sea level lowering)

Unverricht, D., W. Szczucinski, K. Stattegger, R. Jagodzinski, X.T. Le & L.L.W. Kwong (2013)- Modern sedimentation and morphology of the subaqueous Mekong Delta, southern Vietnam. Global and Planetary Change 110, B, p. 223-235.
(Mekong River Delta influenced by tides (meso-tidal system), waves, coastal currents, monsoon-driven river discharge and human impact. Subaqueous part large lateral variability, with two delta fronts, 200 km apart, one at mouth of Bassac distributary, one around Cape Ca Mau in SW. Two different sediment types in delta)

Utami, D.A. (2021)- Modern, equatorial carbonates from Kepulauan Seribu, Indonesia: Facies, isotope geochemistry, and microplastic as a sedimentary component. Doktoral Thesis Rheinisch-Westfalischen Technischen Hochschule Aachen, p. 1-123.
(online at: https://publications.rwth-aachen.de/record/816964/files/816964.pdf)
(Study of Thousand Islands patch reefs complex in Java Sea NW of Jakarta: sedimentary facies, carbonate geochemistry (very low δ13C and δ18O values, related to isotopically depleted riverine input) and impact of microplastics pollution (present in all Kep. Seribu cabonate sediment facies; "Indonesia is known as the second-largest contributor of mismanaged plastic waste to the ocean"))

Van der Kaars, S. & G.D. van den Bergh (2004)- Anthropogenic changes in the landscape of west Java (Indonesia) during historic times, inferred from a sediment and pollen record from Teluk Banten. J. Quaternary Science 19, 3, p. 229-239.
(online at: https://www.academia.edu/110937719/Anthropogenic_changes_in_the_landscape_of_west_Java_Indonesia_during_historic_times_inferred_from_a_sediment_and_pollen_record_from_Teluk_Banten)
(Palynological and charcoal analyses of core from Banten Bay coastal area of NW Java provide vegetation history for last few centuries. Effect of Krakatau eruption insignificant compared to human impact on vegetation in Banten)

Van der Meij, S.E.T., R.G. Moolenbeek & B.W. Hoeksema (2009)- Decline of the Jakarta Bay molluscan fauna linked to human impact. Marine Pollution Bull. 59, p. 101-107.
(online at: https://pdfs.semanticscholar.org/91ea/86518ab13496eec4055c5af9d2477c02e2d2.pdf)
(Molluscan fauna of Jakarta Bay deteriorated between 1937 and 2005 due to increased sewage from Jakarta and sediment input from deforested W Java hinterland. Predatory gastropods and mollusc species associated with carbonate substrate vanished from Jakarta Bay, among which many edible species)

Van der Meij, S.E.T., Suharsono & B.W. Hoeksema (2010)- Long-term changes in coral assemblages under natural and anthropogenic stress in Jakarta Bay (1920-2005). Marine Pollution Bull. 60, 9, p. 1442-1454.
(Comparison of coral assemblages show about half species recorded in 1920 was found again in 2005. Most prominent declines in nearshore disappearance of Acroporidae, Milleporidae and to lesser extent Poritidae)

Van der Stok, J.P. (1897)- Wind and weather, currents, tides and tidal streams in the East Indian archipelago. Government Printing Office, Batavia, p. 1-209.
(online at: https://dspace.library.uu.nl/handle/1874/426811)
(Charts of currents, wind, etc. for Netherlands Indies, by season, area, etc., by Meteorological and Magnetical Observatory in Batavia))

Van der Stok, J.P., S.P. Naber, G.F. Tydeman, W.E. Ringer et al. (ed.) (1922)- De zeeen van Nederlandsch Oost Indie. Koninklijk Nederlands Aardrijkskundig Genootschap, E.J. Brill, Leiden, p. 1-506.
(online at: https://ia600404.us.archive.org/2/items/dezeenvanneder00koni/dezeenvanneder00koni.pdf)
('The seas of Netherlands East Indies'. With chapter on geology and coral reefs by Molengraaff, p. 272-357)

Van Tuijn, J. (1932)- Over een recente daling van den zeespiegel in Nederlandsch Oost-Indie. Tijdschrift Koninklijk Nederlands Aardrijkskundig Genootschap (2) 49, p. 89-99.
(online at: https://resolver.kb.nl/resolve?urn=MMUBA13:001678001:pdf)
('On a recent drop in sea level in Netherlands East Indies'. Many coastlines in W Indonesia show evidence of recent sea level drop of 5-10m (raised coral reefs, etc.). With map of distribution)

Verstappen, H.Th. (1960)- Some observations on karst development in the Malay Archipelago. J. Tropical Geography 14, p. 1-10.
(On limestone karst development with examples from Java S Mountains, C. Sumatra, Halmahera)

Verstappen, H.Th. (1975)- On palaeoclimates and landform development in Malesia. In: G.J. Bartstra & W.A. Casparie (eds.) Modern Quaternary Research in Southeast Asia, A.A. Balkema, Rotterdam, 1, p. 3-35.

(Climate changes in Quaternary lead to alternating humid and more arid periods, also in tropics. Chemical weathering dominates in interglacial equatorial rainforest conditions, like in Holocene. During glacial periods more pronounced seasonality and physical desintegration of rocks becomes more important. Pleistocene lowered sea level probably did not cause incision of valleys on shelf as rivers have very low gradient. Etc.)

Verstappen, H.Th. (1980)- Quaternary climatic changes and natural environment in SE Asia. Geo Journal 4, 1, p. 45-54.
(Lower rainfall and longer dry season characterised SE Asia during Quaternary Glacials. This had important effect on vegetation and landform development. Low Glacial sea levels thought not to have caused river incision; deposition of coarse-textured materials more characteristic. Incision mainly tied to Interglacial and Holocene humic tropical conditions when vegetation interfered with non-concentrated surface wash)

Verstappen, H.Th. (1993)- Geomorphologie volcanique et attenuation des desastres naturels. Les volcans de l'Indonesie, quelques exemples. Bull. Association de Geographes Francais 70, 4, p. 367-376.
(online at: https://www.persee.fr/docAsPDF/bagf_0004-5322_1993_num_70_4_1704.pdf)
('Volcanic geomorphology and natural disaster reduction- the volcanoes of Indonesia, some examples'. French version of Verstappen, 1994)

Verstappen, H.Th. (1994)- The volcanoes of Indonesia and natural disaster reduction. Indonesian J. Geography 26, 68, p. 27-35.
(online at: http://i-lib.ugm.ac.id/jurnal/detail.php?dataId=8432)
(Indonesian volcanic landforms: strato volcanoes, calderas and 'volcano-tectonic' depressions' associated with ignimbrite/ welded tuff plateaus (associated with deep-seated faults). Important role for geomorphological survey and use of aerospace technology in volcanic hazard zoning)

Verstappen, H.Th. (1998)- The effect of climatic change on Southeast Asian geomorphology. J. Quaternary Science 12, 5, p. 413-418.
(Quaternary climatic changes in SE Asia four types of fluctuations: temperature, precipitation, wind patterns and sea-level)

Verstappen, H.Th. (2000)- Outline of the geomorphology of Indonesia. lnt. Institute Aerospace Survey and Earth Sciences (ITC), Enschede, Publication 79, p. 1-212.
(Review of geomorphology research in Indonesia, including geologic framework, climatic factors affecting landforms, volcanic landforms, karst terranes, lowlands, coastal geomorphology and coral reefs)

Walsh, J.P. & C.A. Nittrouer (2003)- Contrasting styles of off-shelf sediment accumulation in New Guinea. Marine Geology 196, 3-4, p. 105-125.
(Study of modern 'highstand' off-shelf sedimentation in PNG Gulf of Papua and Sepik margin. Gulf of Papua receives >3x10-8 tons of sediment annually from rivers. Most accumulates on shelf, <5% deposited in Pandora Trough. Sepik margin different: Sepik River discharges ~1x10 -8 tons of sediment annually, and submarine canyon extends to river mouth. 90% of river material regularly produces gravity-driven flows in canyon)

Walsh, J.P. & C.A. Nittrouer (2004)- Mangrove-bank sedimentation in a mesotidal environment with large sediment supply, Gulf of Papua. Marine Geology 208, p. 225-248.
(Extensive mangrove forests are associated with major river systems. Indo-Pacific region numerous large rivers that discharge onto broad continental shelves, with common mangroves along these coastlines. Gulf of Papua >3350 km^2 of mangrove forests, majority associated with Fly, Kikori and Purari River deltas. Sediment trapping in W Gulf of Papua mangroves estimated to be 2-14% of total sediment load)

Walsh, J.P., C.A. Nittrouer, C.M. Palinkas, A.S. Ogston, R.W. Sternberg & G.J. Brunskill (2004)- Clinoform mechanics in the Gulf of Papua, New Guinea. Continental Shelf Research 24, 19, p. 2487-2510.
(Largest islands of Indo-Pacific Archipelago account for 20-25% of global sediment discharge to oceans, >50% of this supplied to wide (>150 km) continental shelves. These conditions create large-scale clinoforms-sigmoidal-shaped deposits on continental shelf. ~20% of sediment supplied to Gulf of Papua accumulates on

clinoforms, <5% escapes to adjacent slope, 75% trapped on inner-topset region (<20 m depth) and within flood/ delta plains)

Webster, P.J.& N.A. Streten (1978)- Late Quaternary ice age climates of tropical Australasia: interpretations and reconstructions. Quaternary Research 10, 3, p. 279-309.

Weiss, T.L., B.K. Linsley, A.Gordon, Y. Rosenthal & S. Dannenmann-Di Palma (2022)- Constraints on Marine Isotope Stage 3 and 5 sea level from the flooding history of the Karimata Strait in Indonesia. Paleoceanography and Paleoclimatology (AGU) 37, 9, e2021PA004361, p.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2021PA004361)
(Reconstructtion of Pleistocene sea level fluctuations in Karimata Strait (between SW Kalimantan and Belitung islands) Karimata Strait (36m deep) likely closed/exposed during Marine Isotope Stage 3 (MIS 3; 60-26 ka)), which may have aided human migration to Borneo (Global mean sea level was lower than ca -22m). Karimata Strait was inundated during MIS 5a and 5c (117-72 ka), and GMSL was above −12 ± 7 m relative to today. Etc.)

Whiffin, T. (2002)- Plant biogeography of the SE Asian-Australian region. In: P. Kershaw et al. (eds.) Bridging Wallace's Line: the environmental and cultural history and dynamics of the SE Asian- Australian region, Advances in Geology 34, Catena Verlag, p. 61-82.
(Review of present-day floral provinces of SE Asia)

Whittaker, R.J., K. Richards, H. Wiriadinata & J.R. Flenley (1984)- Krakatau 1883 to 1983: a biogeographical assessment. Progress in Physical Geography 8, 1, p. 61-81.

Whitten, T., J. Whitten, C. Goettsch, J. Supriatna & R.A. Mittermeier (1999)- Sundaland. In: R.A. Mittermeier et al. (eds.) Biodiversity hotspots of the world, Cemex, Prado Norte, Mexico, p.

Whitten, T., J. Whitten, C. Goettsch, J. Supriatna & R.A. Mittermeier (1999)- Wallacea. In: R.A. Mittermeier et al. (eds.) Biodiversity hotspots of the world, Cemex, Prado Norte, Mexico, p.

Wicaksono, S.A., J.M. Russell, A. Holbourn & W. Kuhnt (2017)- Hydrological and vegetation shifts in the Wallacean region of central Indonesia since the Last Glacial Maximum. Quaternary Science Reviews 157, p. 152-163.
(Study of vegetation, rainfall and changes in atmospheric circulation during past 26,000 years in C Indonesia from terrestrial plant biomarkers in sediment cores in Mandar Bay, off W Sulawesi. Enriched leaf wax δ13C isotope values during LGM, together with other regional vegetation records, document grassland expansion, implying regionally dry and possibly more seasonal glacial climate. Inundation of Sunda Shelf (in particular opening of Java Sea and Karimata Strait between 9.4- 11.1 ka provided new moisture sources)

Wong, P.P. (2005)- The coastal environment of Southeast Asia. In: A. Gupta (ed.) The physical geography of Southeast Asia, Oxford University Press, p. 177-192.

Woodroffe, C.D. (1993)- Late Quaternary evolution of coastal and lowland riverine plains of Southeast Asia and northern Australia: an overview. Sedimentary Geology 83, p. 163-175.
(Introduction and overview of special issue of Sedimentary Geology)

Woodroffe, C.D. (2000)- Deltaic and estuarine environments and their Late Quaternary dynamics on the Sunda and Sahul shelves. J. Asian Earth Sciences 18, 4, p. 393-413.
(online at: https://eurekamag.com/pdf/003/003399322.pdf)
(Deltaic and estuarine environments of Sunda shelf receive large volumes of sediment and had diverse and productive vegetation before clearing. Three periods of change: long-term response of deltaic- estuarine plains to postglacial sea-level rise, Holocene patterns of coastal progradation and distributary migration under relatively stable sea level and impact of human modifications)

Woodroffe, C.D. (2005)- Southeast Asian deltas. In: A. Gupta (ed.) The physical geography of Southeast Asia, Oxford University Press, p. 219-236.
(Brief review of delta processes and deltas of Irrawaddy, Mekong, Mahakam, Rajang-Barang, etc.in SE Asia)

Woodruff, D.S. (2010)- Biogeography and conservation in Southeast Asia: How 2.7 million years of repeated environmental fluctuations affect today's patterns and the future of the remaining refugial-phase biodiversity. Biodiversity and Conservation 19, p. 919-941.
(SE Asia geography today typical of only 2% of last million years; 90% of time land area was 1.5-2.0x larger as mean sea levels were 62m lower, climates were cooler, and extensive forests and savanna covered emerged Sunda plains. Land areas varied as sea levels fluctuated up to 50m with each of ~50 Pleistocene glacial cycles, and forests expanded and contracted with oscillations in land area and seasonality)

Woodson, A.L., E. Leorri, S.J. Culver, D. J. Mallinson, P.R. Parham, R.C. Thunell, V.R. Vijayan & S. Curtis (2017)- Sea-surface temperatures for the last 7200 years from the eastern Sunda Shelf, South China Sea: climatic inferences from planktonic foraminiferal Mg/Ca ratios. Quaternary Science Reviews 165, p. 13-24.
(online at: www.academia.edu/32712738/Sea_surface_temperatures_for_the_last_7200_years_from_t Etc.)
(Holocene temperature records in two cores from Holocene incised valley fills on Sunda Shelf off Sarawak. Several significant shifts between warmer and colder conditions. Coldest period analyzed at 5500-4500 cal., concomitant with wet period in Borneo. Last ~1000 years recorded warmest SST. Warm interval from ~1000-500 cal years BP may represent Medieval Climate Anomaly)

Wurster, C.M., M.I. Bird, I.D. Bull, F. Creed, C. Bryant, J.A.J. Dungait & V. Paze (2010)- Forest contraction in north equatorial Southeast Asia during the Last Glacial Period. Proc. National Academy of Sciences USA (PNAS), 107, 35, p. 15508-15511.
(online at: www.pnas.org/content/early/2010/07/22/1005507107.full.pdf)
(Distribution of vegetation in SE Asia during Last Glacial Maximum (23-19 ka) still debated. $d^{13}C$ carbon isotope composition of ancient cave guano profiles suggest substantial forest contraction during Last Glacial Period on Peninsular Malaysia (Batu cave) and Palawan (Gangub and Makangit caves), while rainforest was maintained in N Borneo (Niah cave). Results support rainforest 'refugia' hypotheses and provide evidence that environmental barriers reduced mixing between Borneo and Sumatra flora/ fauna. Also sheds light on possible early human dispersal events

Wurster, C.M., H. Rifai, B. Zhou, J. Haig. & M.I. Bird (2019)- Savanna in equatorial Borneo during the Late Pleistocene. Nature Scientific Reports 9, 6392, p. 1-7.
(online at: https://www.nature.com/articles/s41598-019-42670-4)
(The now-drowned Sundaland continent was exposed as contiguous landmass for most of past 2 million years. Stable carbon isotope composition (δ13C) of bat guano and High Molecular Weight n-alkanes from Saleh Cave in S Kalimantan demonstrates open vegetation existed during of much past 40,000 yrs BP (at S equatorial end of hypothesized 'savanna corridor'). Saleh Cave record also shows strong correspondence with insolation and sea surface T of Indo-Pacific Warm Pool, suggesting sensitivity of vegetation to tropical climate change on glacial/interglacial timeframes)

Wust, R.A.J. & R.M. Bustin (2004)- Late Pleistocene and Holocene development of the interior peat-accumulating basin of Tasek Bera, Peninsular Malaysia. Palaeogeogr. Palaeoclim. Palaeoecology. 211, 3-4, p. 241-270.
(Tasek Bera freshwater swamp is lowland dendritic basin in Peninsular Malaysia. Accumulation of organic matter in local lakes during Last Glacial Maximum, but widespread peat deposition did not start until 5300 BP when climatic changes led to evolution of wetland system. Peat accumulation progressively expanded with terrestrialisation of channels and subbasins to paludification of riparian part of lowland forest zone. Etc.).

Yudhicara, A. Ibrahim, V. Asvaliantina, W. Kongko & W. Pranowo (2012)- Sedimentological properties of the 2010 Mentawai tsunami deposit. Bulletin of the Marine Geology 27, 2, p. 55-65.
(online at: http://ejournal.mgi.esdm.go.id/index.php/bomg/article/view/45/46)

(Thickness of 2010 Mentawai tsunami deposits on Sipora and Pagai islands off W Sumatra 1.5-22 cm. Generally composed of fine-coarse sand, in irregular contact with underlying soil. Commonly multiple layers: run up at bottom and back wash at top. Fining upward, parallel lamination and soil clasts observed. Fossils generally rare, but include shallow marine foraminifera and abundant sponge spicules)

Yudhicara, Y. Zaim, Y. Rizal, Aswan, R. Triyono, U. Setiyono & D. Hartanto (2013)- Characteristics of paleotsunami sediments, a case study in Cilacap and Pangandaran coastal areas, Jawa, Indonesia. Indonesian Journal of Geology 8, 4, p. 163-175.
(online at: www.neliti.com/publications/68850/characteristics-of-paleotsunami-sediments-a-case-study-in-cilacap-and-pangandara)
(In Pangandaran, S Java, two possible tsunami deposits on top of soil horizons: 5-6 cm layer of coarse sand at top as 2006 tsunami deposit and 5-10 cm sand layer at bottom as paleotsunami. Sands contain (Miocene?) planktonic and shallow marine foraminifera)

Xue, Z. (2010)- A source-to-sink study of the Mekong River Delta: hydrology, delta evolution, and sediment transport modeling. Ph.D. Thesis North Carolina State University, p. 1-190.

Xue, Z., J.P. Liu, D. DeMaster, L.V. Nguyen & T.K.O. Ta (2010)- Late Holocene evolution of the Mekong subaqueous delta, Southern Vietnam. Marine Geology 269, p. 46-60.
(High-resolution seismic and coring revealed low gradient, subaqueous paleo-delta system, up to 20m thick, surrounding modern Mekong RiverDelta, formed around 3000 BP)

Yosephin, Y., S.H. Nugroho, P.S. Putra, S.W.A. Suedy & M. Izzati (2019)- Palinologi laut di Selat Sumba, Nusa Tenggara Timur. J. RISET Geologi dan Pertambangan (LIPI) 29, 1, p. 43-52.
(online at: https://jrisetgeotam.lipi.go.id/index.php/jrisgeotam/article/view/971/pdf)
('Marine palynology In Sumba Stait, East Nusa Tenggara'. Distribution of Quaternary-Recent spores and pollen on seafloor and shallow core ST 14 in 1283m water depth, N of Sumba. Four zones distinguished)

Zakaria, A.S. (1975)- The geomorphology of Kelantan Delta (Malaysia). Catena 2, p. 337-349.
(Kelantan Delta in NE part of Malay Peninsula. During NE monsoon (October- February) high rate of development, while during rest of year no major development)

Zhang, H., S. Liu, P. Cao, Z. Li, R.A. Troa, R. Zuraida, E. Triarso, M. Hendrizan & X. Shi (2023)- Geochemical records provide evidences for the evolution of the marine redox environment in the southwestern Sumatra waters over the past 35,000 years. J. Asian Earth Sciences 255, 105759, p.

X.2. Quaternary/Recent deposits and environments- deep: Oceanography, Indonesian Throughflow

Ahmad, S.M., F. Guichard, K. Hardjawidjaksana, M.K. Adisaputra & L.D. Labeyrie (1995)- Late Quaternary paleoceanography of the Banda Sea. Marine Geology 122, p. 385-397.
(Oxygen and carbon isotopes of benthic (Uvigerina, Cibicidoides) and planktonic (Gs. ruber) foraminifera from Banda Sea deep-sea over last 180 kyr indicate increase in Banda surface and deep water salinity during glacial conditions. Planktonic data influenced by precession (23 kyr periodicity) while benthic values reflect intermediate Pacific water fluctuations. Banda Sea records indicate general good ventilation. Deepening of lysocline resulted in higher carbonate content during glacial periods, similar to N Pacific)

Alongi, D.M., (2013)- Enhanced benthic response to upwelling of the Indonesian Throughflow onto the southern shelf of Timor-Leste, Timor Sea. J. Geophysical Research: Biogeosciences 118, 1, p. 158-170.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2012JG002150)
(Mainly on water and sediment surface geochemistry response to periodic upwelling along S margin of Timor)

Andersson, H.C. & A. Stigebrandt (2005)- Regulation of the Indonesian Throughflow by baroclinic draining of the North Australian Basin. Deep Sea Research I, 52, 12, p. 2214-2233.
(Mainly low-saline N Pacific water fills upper part of Indonesian seas and downstream buoyant (surface) pool (DBP) that stretches over large part of N Australian Basin. Long-term mean steric sea level in Indonesian seas equal to neighboring Pacific Ocean sea level. Change of steric sea level from Pacific to Indian Ocean sea level at border between DBP and Indian Ocean. Darwin situated inside DBP. Control of ITF set by baroclinic transport capacity of DBP relative to adjacent (Indian Ocean) water. Mean ITF, estimated as outflow from DBP to S Equatorial Current, is about 10 Sv. ITF imprint is fresh and cold. Atmospheric transfer of freshwater to N Pacific and vertical mixing in N Pacific provide driving of mean ITF and ITF is major branch of estuarine-type vertical circulation of N Pacific)

Andruleit, H. (2007)- Status of the Java upwelling area (Indian Ocean) during the oligotrophic northern hemisphere winter monsoon season as revealed by coccolithophores. Marine Micropaleontology 64, p. 36-51.
(Coccolithophores used as indicators for present-day functioning of Java upwelling)

Andruleit, H., A. Luckge, M. Wiedicke & S. Stager (2008)- Late Quaternary development of the Java upwelling system (eastern Indian Ocean) as revealed by coccolithophores. Marine Micropaleontology 69, 1, p. 3-15.
(Coccolithophores help decipher Pleistocene paleoproductivity changes in E Indian Ocean in past 300-65.3 kyr. Core SO139-74KL at seaward limit of fore-arc basin of Indonesian continental shelf, beneath Java upwelling system. Dominated by Florisphaera profunda (41.5%), followed by Gephyrocapsa ericsonii, Emiliania huxleyi and G. oceanica. Warm tropical conditions prevailed throughout)

Arifin, S.R.D. (1996)- Studi paleosalinitas perairan Indonesia sejak Glasial Maksimum terakhir sampai Resen. Proc. 25th Annual Conv. Indonesian Association Geologists (IAGI), Bandung, 2, p. 148-159.
('Study of paleosalinity of Indonesian waters from the Last Glacial Maximum until Recent')

Atmadipoera, A., S.M. Horhoruw, M. Purba & D.Y. Nugroho (2016)- Variasi spasial dan temporal arlindo di Selat Makassar. J. Ilmu Teknologi Kelautan Tropis 8, 1, p. 299-320.
(online at: http://journal.ipb.ac.id/index.php/jurnalikt/article/view/13221/10223)
('Spatial and temporal variation of Indonesian Throughflow in the Makassar Strait'. On the main axis of southward jet of Indonesian Throughflow in Makassar Straits, mainly following western shelf slope)

Atmadipoera, A., R. Molcard, G. Madec, S. Wijffels, J. Sprintall, A. Koch-Larrouy, Indra Jaya & A. Supangat (2009)- Characteristics and variability of the Indonesian throughflow water at the outflow straits. Deep Sea Research I, 56, 11, p. 1942-1954.
(Revised structure and variability of Indonesian Throughflow Water at major outflow straits (Lombok, Ombai, Timor))

Atmadipoera, A. & P. Widyastuti (2014)- A numerical modeling study of upwelling mechanism in southern Makassar Strait. J. Ilmu Teknologi Kelautan Tropis 6, 2, p. 355-371.
(online at: http://journal.ipb.ac.id/index.php/jurnalikt/article/view/9012/7080)
(On upwelling events in S Makassar Strait during SE Monsoon period, associated with low sea surface temperature and high chlorophyll-a concentrations in seawater. Upwelling controlled by SE monsoon winds and enhanced by Indonesian Throughflow TF Makassar jet that creates large circular eddies flow due to complex topography in triangle area of S Makassar- E Java Sea- W Flores Sea)

Auer, G., D. de Vleeschouwer, R.A. Smith, K. Bogus, J. Groeneveld, P. Grunert, I.S. Castaneda, B. Petrick et al. (2019)- Timing and pacing of Indonesian Throughflow restriction and its connection to Late Pliocene climate shifts. Paleoceanography and Paleoclimatology (AGU) 34, 4, p. 635-657.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2018PA003512)
(Pliocene characterized by gradual shift of global climate toward cooler and more arid conditions. Progressive restriction of Indonesian Throughflow (ITF) may have enhanced this shift toward stronger meridional thermal gradients. Reduced ITF, caused by N-ward movement of Australia and uplift of Indonesia, impeded global thermohaline circulation. Calcareous nannofossil record between 3.6- 3.0 Ma from IODP site U1463 suggests tropical Pacific ITF sources replaced by cooler, fresher N Pacific waters)

Ayers, J.M., P.G. Strutton, V.J. Coles, R.R. Hood & R.J. Matear (2014)- Indonesian throughflow nutrient fluxes and their potential impact on Indian Ocean productivity. Geophysical Research Letters 41, 14, p. 5060-5067.
(ODP Site U1463 provides record of local surface water conditions and Australian climate in relation to changing ITF connectivity. ITF configuration culminated ~3.54 Ma. Decrease in warm, oligotrophic taxa with shift from Gephyrocapsa to Reticulofenestra and increase of mesotrophic taxa suggest tropical Pacific ITF sources replaced by cooler, fresher, N Pacific waters. After 3.3 Ma restructured ITF established conditions for inception of Sahul-Indian Ocean Bjerknes mechanism and increased response to glacio-eustatic variability)

Barmawidjaja, D.M., E.J. Rohling, W.A. van der Kaars, C. Vergnaud Grazzini & W.J. Zachariasse (1993)- Glacial conditions in the northern Molucca Sea region (Indonesia). Palaeogeogr. Palaeoclim. Palaeoecology 101, p. 147-167.
(Core K12 from 3510m water depth N of N Halmahera spans last 27,000 yrs. Palynology suggests glacial time climate drier than today. This and lower sea level resulted in expansion of Lower Montane oak forests on Halmahera. Surface water salinities probably higher. Also well-developed 'Deep Chlorophyll Maximum layer'. With elevated planktonic forams Neogloboquadrina dutertrei and presence of Ng. pachyderma in glacial times (similar to observed in Sulu Sea by Linsley et al. 1985))

Barmawidjaja, D.M., A.F.M de Jong, K. van der Borg, W.A. van der Kaars & W.J. Zachariasse (1989)- Kau Bay, Halmahera, a late Quaternary palaeoenvironmental record of a poorly ventilated basin. In: J.E. van Hinte et al. (eds.) Snellius-II Symposium, Jakarta 1987, Netherlands J. of Sea Research 24, 4, p. 591-605.

Barmawidjaja, D.M., A.F.M de Jong, K. van der Borg, W.A. van der Kaars, W.J.M. van der Linden & W.J. Zachariasse (1989)- The timing of postglacial marine invasion of Kau Bay, Halmahera, Indonesia. Radiocarbon 31, 3, p. 948-956.
(Kau Bay, Halmahera, E Indonesia is small 470m deep marine basin, separated from SW Pacific Ocean by 40m deep shallow sill. Bay water below depth of ~350m devoid of oxygen and high dissolved H2S. Radiocarbon dating on piston cores and study on microfossils demonstrate Kau Bay was freshwater lake in Weichselian times (freshwater diatoms). At 10,000 BP reconnected with open ocean. If sill depth did not change in intervening years, sea level at 10,000 BP stood 40m below present level)

Barrows, T.T. & S. Juggins (2004)- Sea-surface temperatures around the Australian margin and Indian Ocean during the Last Glacial Maximum. Quaternary Science Reviews 24, p. 1017-1047.
(Sea-surface temperature maps for oceans around Australia based on planktonic foraminifera assemblages. During Last Glacial Maximum cooling in tropics of up to 4 °C in E Indian Ocean, mostly between 0- 3 °C elsewhere along equator. High latitudes cooled more, with maximum of 7-9 °C in SW Pacific Ocean)

Baumgart, A., T. Jennerjahn, M. Mohtadi & D. Hebbeln (2010)- Distribution and burial of organic carbon in sediments from the Indian Ocean upwelling region off Java and Sumatra, Indonesia. Deep Sea Research I, 57, 3, p. 458-467.
(On marine organic carbon productivity and preservation in Indian Ocean off Sumatra- Java- Banda Islands. Maximum concentrations of organic carbon (3.0%) and nitrogen (0.31%) in N Mentawai and Savu and Lombok basins. High productivity related to seasonal upwelling in Indian Ocean S of Java-Sumatra between June-November responsible for high carbon accumulation S of E Java- Lombok and in Savu Basin. Better preservation by reduced ventilation contributes to high carbon in N Mentawai)

Bender, M., T. Mann, P. Stocchi, D. Kneer, T. Schone, J. Illigner, J. Jompa & A. Rovere (2020)- Late Holocene (0-6 ka) sea-level changes in the Makassar Strait, Indonesia, Climate of the Past (EGU), 16, p. 1187-1205.
(online at: https://cp.copernicus.org/articles/16/1187/2020/cp-16-1187-2020.pdf)
(Results of Holocene paleo sea level measuruments from microatolls in Spermonde Archipelago in SW Sulawesi (General: rates of post-Last Glacial Maximum sealevel rise progressively decreased between 8-2.5 k, remaining constant thereafter (until post-industrial sea-level rise). Local M Holocene sea-level highstand between ~6-3 ka in low latitudes, not eustatic in origin but combined effect of glacial isostatic adjustment and redistribution of water masses due to changes in gravitational attraction and Earth rotation following ice mass loss)

Boggild, O.B. (1916)- Meeresgrundproben der Siboga-Expedition. Siboga Expeditie Monograph 65, Brill, Leiden, p. 1-54. *(online at: https://books.google.com/books/about/Meeresgrundproben_der_Siboga_expedition.html?id=mbQNAQAAIAAJ)*
('Sea floor samples of the Siboga Expedition'. Extensive descriptions of deep sea sediment samples from Siboga Expedition of 1899-1900 in Eastern Indonesian archipelago. Deep marine samples are blue mudstones, volcanic mud, Globigerina marl and red clays. Deepest samples (below 3900m) are lime-free red clays. No diatom or radiolarian clays. Greenish sediments generally in shallower regions)

Bray, N.A., S. Hautala, J. Chong & J. Pariwono (1996)- Large-scale sea level, thermocline, and wind variations in the Indonesian throughflow region. J. of Geophysical Research 101, p. 12239-12254.

Burnett, W.H., V.M. Kamenkovich, G.L. Mellor & A.L. Gordon (2000)- The influence of the pressure head on the Indonesian Seas circulation. Geophysical Research Letters 27, 15, p. 2273-2276.
(online at: https://www.gfdl.noaa.gov/bibliography/related_files/burnett0001.pdf)
(Model suggests pressure difference between Pacific and Indian Ocean does not significantly influence total transport of Indonesian throughflow)

Cane, M.A. & P. Molnar (2001)- Closing of the Indonesian seaway as a precursor to east African aridification around 3-4 million years ago. Nature 411, p. 157-162.
(Closure of Indonesian seaway 3-4 Myr ago may be responsible for global climate changes. N movement of New Guinea, ~5 Myr ago, switched source of flow through Indonesia from warm S Pacific to colder N Pacific waters, decreasing Indian Ocean sea surface temperatures and leading to aridification of E Africa. Changes in equatorial Pacific may have reduced atmospheric heat transport from tropics to higher latitudes, stimulating global cooling and growth of ice sheets)

Cappelli, E.L.G. (2015)- Late Pleistocene variability in Timor Sea hydrology: evidence from paleotemperature proxies. Doctoral Thesis Kiel University, Germany, p. 1-194.
(online at: http://macau.uni-kiel.de/...)

Cappelli, E.L., G.A. Holbourn, W. Kuhnt & M. Regenberg (2016)- Changes in Timor Strait hydrology and thermocline structure during the past 130 ka. Palaeogeogr. Palaeoclim. Palaeoecology 462, p. 112-124.
(Data from core from 485m depth at S edge of Timor Trough suggest lower thermocline warming during globally cold periods (MIS 4-MIS 2), related to weaker and contracted thermocline ITF and advection of warm-salty Indian Ocean waters)

Chen, Y., J.Xu, J. Liu, T. Li, Z. Xiong, P. Zhang & H.Yan (2022)- Climatic and tectonic constraints on the Plio–Pleistocene evolution of the Indonesian Throughflow intermediate water recorded by benthic δ18O from IODP site U1482. Quaternary Science Reviews 295, 107666, p. 1-15.
(Plio-Pleistocene benthic foram oxygen isotope record from deep see core from Site U1482 (IODP Exp. 363) in Timor Passage, the main exit of Indonesian Throughflow to Indian Ocean (~3.17-1.07 Ma). Prominent 41-kyr glacial-interglacial cycles, with decreased glacial-interglacial amplitudes at~1.6–1.2 Ma. Etc.)

Christensen, B.A., W. Renema, J. Henderiks, D. de Vleeschouwer, J. Groeneveld, I.S. Castaneda, L. Reuning, K. Bogus et al. (2017)- Indonesian Throughflow drove Australian climate from humid Pliocene to arid Pleistocene. Geophysical Research Letters 44, 13, p. 6914-6925.
(online at: http://onlinelibrary.wiley.com/doi/10.1002/2017GL072977/epdf)
(Late Miocene- M Pleistocene sedimentary proxy records (incl. IODP Site U1463) show NW Australia underwent abrupt transition from arid to humid climate conditions at 5.5 Ma, likely receiving year-round rainfall. After ~3.3 Ma climate shift to increasingly seasonal precipitation, back to arid interval after 2.4 Ma. Linked to progressive restriction of flow of warm surface currents from Pacific (Indonesian Throughflow))

Cresswell, G., A. Frisch, J. Peterson & D. Quadfasel (1992)- Circulation in the Timor Sea. J. of Geophysical Research 98, C8, p. 14379-14389.
(Current measurements in Timor Strait suggest transport of about 7 Sv toward Indian Ocean, with about half of this in upper 350m)

Damanik, A., K.A. Maryunani, S.H. Nugroho & P.S. Putra (2020)- Climate variability since Last Glacial Maximum based on distribution of foraminifera in North Papua waters. Marine Research in Indonesia (LIPI) 45, 2, p. 59-66.
(online at: https://www.researchgate.net/publication/354730060_Climate_variability_since_last_glacial_maximum_based_on_distribution_of_foraminifera_in_North_Papua_Waters_Pacific_Ocean)
(Variabilities in abundance of Late Pleistocene- Holocene planktonic foraminifera species in 246 cm core OS-07, from 4327m water depth in SW Pacific N of Birds Head, West Papua, allow recognition of global climate events such as Last Glacial Maximum (~19-17 kyr; Cluster 1A-1C, dominated by Globigerinoides ruber, low Pulleniatina), Younger Dryas cool event (~11-9 kyr), 8.2 ka event and and Mid-Holocene Transition (~4kyr))

De Deckker, P. (2016)- The Indo-Pacific Warm Pool: critical to world oceanography and world climate. Geoscience Letters (AOGS) 3, 20, p. 1-12.
(online at: https://geoscienceletters.springeropen.com/articles/10.1186/s40562-016-0054-3)
(Review of climatic significance of Indo-Pacific Warm Pool, a large area with permanent surface T >28 °C in SW Pacific/ Indonesian region ('heat and steam engine' of globe))

De Deckker, P., N.J. Tapper & S. van der Kaars (2002)- The status of the Indo-Pacific Warm Pool and adjacent land at the Last Glacial Maximum. Global and Planetary Change 35, p. 25-35.
(During Last Glacial Maximum significant drop in precipitation in Warm Pool region that would explain increase in salinity while Sea surface T decreased by ~2°C, causing decrease of atmospheric convection over Indo-Pacific Warm Pool. Drier atmosphere and diminished level of cloud cover also reduced nocturnal temperatures at elevation, forcing tree line to drop and glaciers to much lower altitudes than today)

De Vleeschouwer, D, G. Auer, R. Smith, K. Bogus, B. Christensen, J. Groeneveld, B. Petrick et al. (2018)- The amplifying effect of Indonesian Throughflow heat transport on Late Pliocene Southern Hemisphere climate cooling. Earth Planetary Science Letters 500, p. 15-27.
(Unusually short glaciation interrupted warm Pliocene around 3.3 Ma (MIS M2). One proposed mechanism for glaciation and quick return to normal is reduced Equator-to-Pole heat transfer in response to tectonically reduced Indonesian Throughflow (ITF). Multi-proxy orbital-scale record for 3.7-2.8 Ma interval from IODP Site U1463 shows heat-transport through ITF did not shut down completely, but intensity decreased prior to and during MIS M2, amplifying global cooling by advancing the thermal isolation of Antarctica)

Ding, X., F. Bassinot, F. Guichard & N.Q. Fang (2013)- Indonesian Throughflow and monsoon activity records in the Timor Sea since the last glacial maximum. Marine Micropaleontology 101, p. 115-126.
(online at: http://www.cugb.edu.cn/upload/20600/papers_upload/291.pdf)
(Foraminifera-based multi-proxy study in main Indonesian Throughflow (ITF) outflow area of Timor Sea)

Ding, X., F. Guichard, F. Bassinot, L. Labeyrie & N.Q. Fang (2002)- Evolution of heat transport pathways in the Indonesian Archipelago during last deglaciation. Chinese Science Bull. 47, 22, p. 1912-1917.

Ehlert, C., M. Frank, B.A. Haley, U. Boniger, P. De Deckker & F.X. Gingele (2011)- Current transport versus continental inputs in the eastern Indian Ocean: radiogenic isotope signatures of clay size sediments. Geochem. Geophysics Geosystems 12, 6, Q06017, p. 1-17.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2011GC003544)
(Nd, Sr and Pb of clay-sized sediments allow tracing of source areas of sediment and current transport off NW Australia and SW of Java)

Fan, W., Z. Jian, Z. Chu, H. Dang, Y. Wang, F. Bassinot, X. Han & Y. Bian (2018)- Variability of the Indonesian Throughflow in the Makassar Strait over the last 30 ka. Nature Scientific Reports 8, 5678, p. 1-8.
(online at: https://www.nature.com/articles/s41598-018-24055-1)
(Indonesian Through Flow flows into e Indonesian Seas through two paths, mainly W path, in which N Pacific water enters Indonesian seas through S cape of Mindanao Island and Sulawesi Sea, and penetrates Makassar Strait. Thermocline T and salinity gradient across Makassar Strait increased during last glacial period relative to Holocene and was significantly larger during 13.4-19 ka BP and 24.2-27 ka BP (weakened ITF))

Feng, M., N. Zhang, Q. Liu & S. Wijffels (2018)- The Indonesian throughflow, its variability and centennial change. Geoscience Letters 5, 3, p. 1-10.
(online at: https://link.springer.com/content/pdf/10.1186%2Fs40562-018-0102-2.pdf)

Ffield, A.L., K. Vranes, A.L. Gordon, R.D. Susanto & S.L. Garzoli (2000)- Temperature variability within Makassar Strait. Geophysical Research Letters 27, 2, p. 237-240.
(Average thermocline T varies with S-ward Makassar transport volume: during high volume transport, average T of thermocline also high)

Fieux, M., C. Andrie, P. Delecluse, A.G. Ilahude, A. Kartavtseff, F. Mantisi, R. Molcard & J.C. Swallow (1994)- Measurements within the Pacific-Indian oceans throughflow region. Deep Sea Research I, 41, 7, p. 1091-1130.
(online at: https://core.ac.uk/download/pdf/39857022.pdf)
(Two hydrographic sections between Australian shelf and Indonesia, where throughflow between Pacific Ocean and Indian Ocean emerges. Subtropical and Central waters separated from waters of Indonesian seas by sharp hydrological front, around 13°30 S, below thermocline down to 700 m. Off Sumba, Savu, Roti and Timor channels a core of low salinity and high oxygen near-surface water in axis of each channel, suggesting strong currents from Indonesian seas towards Indian Ocean. Deep water flowing in opposite direction, from Indian Ocean to Timor basin below 1400 m to sill depth)

Fieux, M., R. Molcard & A.G. Ilahude (1996)- Geostrophic transport of the Pacific-Indian Oceans throughflow. J. of Geophysical Research 101, C5, p. 12421-12432.

Furue, R., M. Nonaka & H. Sasaki (2023)- The intrinsic variability of the Indonesian Throughflow. Frontiers in Marine Science 10, 117304, p. 1-17.
(online at: https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1117304/full)
(Indonesian Throughflow (ITF) carries annual average of about 15 Sv of water from Pacific through Indonesian Seas into Indian Ocean. Year-to-year variation ~ 1 to 4 Sv. Observed intrinsic variability may come from zonal jets in western subtropical North Pacific)

Gagan, M.K., E.J. Hendy, S.G. Haberle & W.S. Hantoro (2004)- Post-glacial evolution of the Indo-Pacific warm pool and El Nino-Southern Oscillation. Quaternary International 118, p. 127-143.
(Sea surface temperature of Indo-Pacific Warm Pool during Last Glacial Maximum ~3°C cooler than today)

Gallagher, S.J., G. Auer, C.M. Brierley, C.S. Fulthorpe & R. Hall (2024)- Cenozoic history of the Indonesian Gateway. Annual Review Earth Planetary Sciences 52, p. 581-604.
(online at: https://www.annualreviews.org/docserver/fulltext/earth/52/1/annurev-earth-040722-111322.pdf)
(Pacific Ocean water flows through Indonesian Archipelago into Indian Ocean via Indonesian Throughflow. Gateway initiated around 23 Ma, when Australia collided with SE Asia. By ~10 Ma gateway was sufficiently restricted to create a proto–warm pool in SW Pacific. During Pliocene it alternated between more or less restricted conditions, until modern oceanic conditions were established by 2.7 Ma. Indonesian Gateway key branch of global thermohaline oceanic circulation, exerting major control on Earth's climate over last 25 Myr)

Gallagher, S.J., M.W. Wallace, C.L. Li, B. Kinna, J.T. Bye, K. Akimoto & M. Torii (2009)- Neogene history of the West Pacific Warm Pool, Kuroshio and Leeuwin currents. Paleoceanography 24, PA1206, p. 1-27.
(Presence of Indo-Pacific larger foraminifera and smaller taxa Asterorotalia and Pseudorotalia on Australia NW Shelf at ~4 Ma and from 1.6- 0.8 Ma suggest periods of increased Indonesian Throughflow (connecting W Pacific Warm Pool and Indian Ocean). From 10 to 4.4 Ma lack of biogeographic connectivity between Pacific and Indian Oceans suggests Indonesian Throughflow restriction, when collision of Australia and Asia trapped warmer waters in Pacific, creating WPWP biogeographic province from equator to 26°N)

Ganssen, G., S.R. Troelstra, B. Faber, W.A. van der Kaars & M. Situmorang (1989)- Late Quaternary paleoceanography of the Banda Sea, Eastern Indonesian piston cores (Snellius-II expedition, cruise G5). In: J.E. van Hinte et al. (eds.) Proc. Snellius II Symposium, Jakarta 1987, Netherlands J. of Sea Research 24, 4, p. 491-494.
(Late Quaternary paleoclimatology and oceanography deduced from two Banda Sea piston cores. Two-step deglaciation seen in oxygen isotopes, but did not lead to higher surface water temperatures but to wetter climate as recorded in palynofacies. Increasing monsoon regime around 10 ka. At ~10.5 ka climate got wetter. Upwelling intensity increased around 9.2 ka and monsoonal intensity decreased again at ~2.7 ka)

Gingele, F.X., P. De Deckker, A. Girault & F. Guichard (2002)- History of the South Java Current over the past 80 ka. Palaeogeogr. Palaeoclim. Palaeoecology 183, p. 247-260.
(Sediment core below South Java Current (SJC) used to reconstruct paleoclimate/ paleoceanography of past 80 ka. Considerable contrasts from glacial to Holocene. Presently below low-salinity tongue from Java Sea via Sunda Strait, with characteristic terrigenous matter. During last glacial stage sea level was lower, Sunda Strait was closed and terrigenous supply from that source ceased. Circulation patterns alternatively dominated by N Hemisphere E Asian Monsoon system and S Hemisphere Australian Monsoon system. Between 20-12 ka, (Australian) SE Winter Monsoon reached maximum and intensified W flowing S Java Current)

Godfrey, J.S. (1996)- The effect of the Indonesian Throughflow on ocean circulation and heat exchange with atmosphere: a review. J. of Geophysical Research- Oceans 101, C5, p. 12217-12238.

Godfrey, J.S., A.C. Hirst & J. Wilkin (1993)- Why does the Indonesian throughflow appear to originate from the North Pacific? J. Physical Oceanography 23, p. 1087-1098.
(online at: https://journals.ametsoc.org/view/journals/phoc/23/6/1520-0485_1993_023_1087_wdtita_2_0_co_2.xml)
(Modeling discussion. See also Gordon, 1995)

Gordon, A.L. (1995)- When is appearance reality? A comment on why does the Indonesian throughflow appear to originate from the North Pacific. J. Physical Oceanography 25, p. 1560-1567. *(online at: https://journals.ametsoc.org/view/journals/phoc/25/6/1520-0485_1995_025_1560_wiarac_2_0_co_2.xml)*
(Transfer of water from Pacific to Indian Oceans in the Indonesian Seas comprised primarily of North Pacific water masses)

Gordon, A.L. (2005)- Oceanography of the Indonesian Seas and their throughflow. Oceanography 18, 4, p. 14-27.
(online at: www.tos.org/oceanography/issues/issue_archive/issue_pdfs/18_4/18.4_gordon.pdf)
(Elegant review of Indonesian Throughflow between Pacific and Indian Oceans)

Gordon, A., A. Ffield & A.G. Ilahude (1994)- Thermocline of the Flores and Banda Seas. J. of Geophysical Research 99 (C9), p. 18235-18242.

Gordon, A.L. & R.A. Fine (1996)- Pathways of water between the Pacific and Indian Oceans in the Indonesian seas. Nature 379, p. 146-149.
(Indonesian Throughflow dominated by (1) low-salinity well ventilated N Pacific water through Makassar Strait upper thermocline and (2) more saline S Pacific water through lower thermocline of E Indonesian Seas)

Gordon, A.L., C.F. Giulivi & A.G. Ilahude (2003)- Deep topographic barriers within the Indonesian seas. In: F. Schott (ed.) Physical oceanography of the Indian Ocean during the WOCE period, Deep Sea Research II, 50, p. 2205-2228.
(Pacific water spills over deep topographic barriers into Sulawesi, Seram and Banda seas. W-most flow through Makassar Strait shallower barriers: 1350m deep Sangihe Ridge, providing access to Sulawesi Sea and 680m deep Dewakang Sill between S Makassar Strait- Flores Sea. Along E path, Pacific water must flow over 1940 m barrier of Lifamatola Passage before passing into deep Seram and Banda Seas. Deepest barrier encountered by W and E paths is 1300-1450 m Sunda Arc sill near Timor. Savu Sea connected to Banda Sea down to 2000 m, but closed to Indian Ocean at depth shallower than Timor Sill. Density-driven overflows force upwelling of resident waters within confines of basins)

Gordon, A.L., B.A. Huber, E.J. Metzger, R.D. Susanto, H.E. Hurlburt & T.R. Adi (2012)- South China Sea throughflow impact on the Indonesian throughflow. Geophysical Research Letters 39, L11602, 11, p. 1-7.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/pdf/10.1029/2012GL052021)
(Increased SCS throughflow during El Nino events increases S-ward flow of buoyant surface water through Sulu Sea into N Makassar Strait, inhibiting tropical Pacific surface water injection into Makassar Strait)

Gordon, A.L., S. Ma, D.B. Olson, P. Hacker, A. Ffield, L.D. Talley, D. Wilson & M. Baring (1997)- Advection and diffusion of Indonesian throughflow water within the Indian Ocean South Equatorial Current. Geophysical Research Letters 24, 21, p. 2573-2576.
(Warm, low salinity Pacific water flows through Indonesian Seas into E Indian Ocean, spreading within S Equatorial Current. Low salinity throughflow trace, centered along 12°S, stretches across Indian Ocean, separating monsoon-dominated regime of N Indian Ocean from subtropical stratification to S)

Gordon, A.L. & J.L. McClean (1998)- Thermohaline stratification of the Indonesian seas: model and observations. J. Physical Oceanography 29, p. 198-216.
(Oceanographic models)

Gordon, A., J. Sprintal, H.M. Van Aken, D. Susantoa, S. Wijffels, R. Molcarde, A. Ffield, W. Pranowo & S. Wirasantosa (2010)- The Indonesian Throughflow during 2004–2006 as observed by the INSTANT program. Dynamics of Atmospheres and Oceans 50, 2, p. 115-128.
(online at: https://www2.atmos.umd.edu/~dwi/papers/gordon_dao2010.pdf)
(The 3-year mean Indonesian Throughflow transport into the Indian Ocean recorded by INSTANT program is ~30% greater than values of non-simultaneous measurements made prior to 2000)

Gordon, A.L., R.D. Susanto & A. Ffield (1999)- Throughflow within the Makassar Strait. Geophysical Research Letters 26, 21, p. 3325-3328.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/1999GL002340)
(Velocity measurements in constriction in Makassar Straits near 3°S suggest average throughflow is 9.3 Sv. Throughflow within Makassar Strait can account for all of Pacific to Indian interocean transport)

Gordon, A.L., R.D. Susanto, A. Ffield, B.A. Huber, W. Pranowo & S. Wirasantosa (2008)- Makassar Strait throughflow, 2004 to 2006. Geophysical Research Letters 35, L24605, p. 1-5.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/pdf/10.1029/2008GL036372)

Gordon, A.L., R.D. Susanto & K. Vranes (2003)- Cool Indonesian throughflow as a consequence of restricted surface layer flow. Nature 425, p. 824-828.
(online at: https://www.atmos.umd.edu/~dwi/papers/gordon_dwi_nature03.pdf)
Within Makassar Strait (primary pathway of Indonesian throughflow), flow far cooler than estimated earlier. During boreal winter monsoon, wind drives buoyant, low-salinity Java Sea surface water into S Makassar Strait, creating N-ward pressure gradient in surface layer of strait. This surface 'freshwater plug' inhibits warm surface water from Pacific Ocean from flowing S into Indian Ocean, leading to cooler Indian Ocean sea surface, which may weaken Asian monsoon. Summer wind reversal eliminates obstructing pressure gradient, by transferring more-saline Banda Sea surface water into S Makassar Strait)

Gourlan, A.T., L. Meynadier & C.J. Allegre (2008)- Tectonically driven changes in the Indian Ocean circulation over the last 25 Ma: Neodymium isotope evidence. Earth Planetary Science Letters 267, p. 353-364.
(Nd isotopic composition of Indian and Pacific Ocean cores for past 25 Ma reflect paleo-oceanography. Prior to 14 Ma broad passage between Indian and Pacific Oceans. Progressive closure of Indonesian gateway due to N movement of Australia and S-ward motion of Sunda block induced reorganization of paleoceanic circulation at ~14 Ma. Further reduced flux of Pacific water into Indian Ocean between 4- 2.5 Ma caused by final closure of Indonesian Gateway)

Hallberg, P.L., F. Schenk, K.A. Yamoah, X. Kuang & R.H. Smittenberg (2022)- Seasonal aridity in the Indo-Pacific Warm Pool during the Late Glacial driven by El Nino-like conditions. Climate of the Past 18, 7, p. 1655-1674.
(online at: https://cp.copernicus.org/articles/18/1655/2022/)
(Island SE Asia today is part of Indo-Pacific Warm Pool, an everwet humid region with world's largest tropical peat deposits. Most of this peat accumulated only recently, during Holocene, suggesting climate was drier and/or more seasonal during earlier times. During Last Glacial Maximum (LGM, 21 ka BP) colder, drier climate, with higher seasonality and likely expansion of savanna (and no peat). Late Glacial (14.7-11.7 ka BP) climate in Indonesian region transitional cool/dry/seosonal period before onset of warm Holocene (11.7- 0 ka))

Hautala, S., J. Reid & N. Bray (1996)- The distribution and mixing of Pacific water masses in the Indonesian seas. J. of Geophysical Research 101, C5, p. 12375-12389.

Hautala, S., J. Sprintall, J.T. Potemra, J.C. Chong, W. Pandoe, N. Bray & A. Ilahude (2001)- Velocity structure and transport of the Indonesian Throughflow in the major straits restricting flow into the Indian Ocean. J. of Geophysical Research 106, p. 19527-19546.

Hendrizan, M., S.Y. Cahyarini, N.S. Ningsih & R. Rachmayani (2021)- Indonesian Throughflow intensity and sea surface Temperature anomaly since the Last Deglaciation: an overview. Proc. Int. Conference Ocean and Earth Sciences 18-20 November 2020, Jakarta 2020, IOP Conference Series: Earth and Environmental Sciences 789, 012053, p. 1-8.
(online at: https://iopscience.iop.org/article/10.1088/1755-1315/789/1/012053/pdf)

Hendrizan, M., W. Kuhnt & A. Holbourn (2017)- Variability of Indonesian Throughflow and Borneo runoff during the last 14 kyr. Paleoceanography 32, 10, p. 1054-1069.
(online at: https://www.whoi.edu/cms/files/Hendrizan_etal_2017_283664.pdf)
(Reconstruction of hydrological changes in Makassar Strait over last 14 kyr from Core SO217-18517 off Mahakam Delta (698 m water depth). Sea surface T based on Mg/Ca of Globigerinoides ruber, etc. provide evidence for increased precipitation during Bølling-Allerød (BA) and E Holocene, and for warmer/ more saline surface waters and decrease in Indonesian Throughflow during Younger Dryas (YD). Changes in Makassar Strait surface hydrology reflect S-ward displacement of Intertropical Convergence Zone)

Hendrizan, M., W. Kuhnt, A. Holbourn, S.Y. Cahyarini & N.S. Ningsih (2022)- Kalimantan hydroclimate variability since the last glacial period. Int. J. Earth Sciences 112, p. 615–629.
(online at: https://link.springer.com/article/10.1007/s00531-022-02266-2)
(Climate signal from Late Pleistocene to Holocene sediment Core SO217-18522 in 975m water depth from N Makassar Strait)

Hirst, A.C. & J.S. Godfrey (1993)- The role of the Indonesian Throughflow in a global GCM. J. Physical Oceanography 23, p. 1057-1086.
(online at: http://journals.ametsoc.org/doi/pdf/)
(Global Climate Modeling of effects of variations in Indonesian Throughflow. Throughflow generally warms Indian Ocean and cools the Pacific Ocean)

Hirst, A.C. & J.S. Godfrey (1994)- The response to a sudden change in Indonesian Throughflow in a global ocean GCM. J. Physical Oceanography 24, 9, p. 1895-1910.
(online at: https://journals.ametsoc.org/view/journals/phoc/24/9/1520-0485_1994_024_1895_trtasc_2_0_co_2.xml)
(Climate models imaging response to changes in global climate with changes in rates of Indonesian Throughflow)

Holbourn, A., W. Kuhnt, H. Kawamura, Z. Jian, P. Grootes, H. Erlenkeuser & J. Xu (2005)- Orbitally paced paleoproductively variations in the Timor Sea and Indonesian Throughflow variability during the last 460 kyr. Paleoceanography 20, 3, PA3002, p. 1-18.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2004PA001094)
(Timor Sea, productivity fluctuations over last 460 kyr strongly influenced by monsoonal wind patterns off NW Australia (23 and 19 kyr). Also modulated by sea level-related variations in intensity of Indonesian Throughflow (100 kyr))

Holbourn, A., W. Kuhnt & J. Xu (2011)- Indonesian Throughflow variability during the last 140 ka: the Timor Sea outflow. In: R. Hall, M.A. Cottam & M.E.J. Wilson (eds.) The SE Asian gateway: history and tectonics of Australia-Asia collision, Geological Society, London, Special Publ. 355, p. 283-303.
(Steeper thermocline T gradient in Timor Strait than in E Indian Ocean during glacials, implying decrease in Indonesian Throughflow cool thermocline outflow. Major freshening and cooling of thermocline waters at ~9.5 ka, when sea level rose above critical threshold, allowing establishment of shallow marine connection from S China Sea to Java Sea)

Huang, Y.S., T.Q. Lee & S.K. Hsu (2011)- Milankovitch scale environmental variation in the Banda Sea over the past 820 ka; fluctuation of the Indonesian through-flow intensity. J. Asian Earth Sciences 40, 6, p. 1180-p. 1188.
(Environmental variation in Banda Sea over past 820 ka from core MD012380 data. Magnetic spectral data show Milankovitch periods, especially eccentricity period (400-ka and 100-ka) after 420 ka, but before 420 ka obliquity (41-ka) and precession (23-ka and 19-ka) cycles. In Banda Sea main factor controlling variation of magnetic minerals fluctuation of Indonesian Throughflow intensity due to sea-level change)

Ilahude, A.G. & A.L. Gordon (1996)- Water masses of the Indonesian Seas Throughflow. Proc. Third International IOC-WESTPAC Scientific Symposium, Bali 1994, p. 572-587.

Ilahude, A.G. & A.L. Gordon (1996)- Thermocline stratification within the Indonesian Seas. J. of Geophysical Research 101, C5, p. 12401-12410.
(Makassar Straits carries bulk of Pacific water throughflow, consisting of North Pacific water (upper thermocline Smax) and North Pacific Intermediate Water (lower thermocline Smin). Relatively salty water of South Pacific origin in lower thermocline in Seram and S Moluccu seas, particularly in NW monsoon)

Iwatani, H., M. Yasuhara, Y. Rosenthal & B.K. Linsley (2018)- Intermediate-water dynamics and ocean ventilation effects on the Indonesian Throughflow during the past 15,000 years: ostracod evidence. Geology (GSA) 46, 6, p. 567-570.
(Ostracods in core from central part of Makassar Strait suggest warm water/ low oxygen water fauna and species diversity rapidly increased at ~12 ka, reaching maxima during Younger Dryas. Interpreted as response to stagnation of intermediate water due to decline in Inonesian Throughflow intensity. After ~7 ka, ostracod faunal composition changed to deeper, colder and high oxygen fauna, responding to deglacial E Holocene sea-level rise. Etc.)

Jian, Z., B. Huang, W. Kuhnt & H.L. Lin (2001)- Late Quaternary upwelling intensity and East Asian monsoon forcing in the South China Sea. Quaternary Research 55, p. 363-370.

Karas, C. (2010)- Mid-Pliocene restriction of the Indonesian Gateway and its implication on ocean circulation and climate. Ph.D. Thesis Christian-Albrechts University, Kiel, p. 1-96. *(online at: https://macau.uni-kiel.de/servlets/MCRFileNodeServlet/dissertation_derivate_00003139/Karas_diss.pdf)*

Karas, C., D. Nurnberg, A.K. Gupta, R. Tiedemann, K. Mohan & T. Bickert (2009)- Mid-Pliocene climate change amplified by a switch in Indonesian subsurface throughflow. Nature Geoscience 2, June 2009, p. 434-438.
(Partial closing of Indonesian Gateway between 4-3 Ma supposedly triggered switch in source of waters feeding Indonesian Throughflow into Indian Ocean from warm- salty S Pacific water to cool and relatively fresh N Pacific Ocean waters. Planktonic foraminifera suggest surface conditions in E tropical Indian Ocean rel. stable from 5.5- 2 Ma, but subsurface waters freshened and cooled by about 4°C between 3.5- 2.95 Ma. Restriction of Indonesian Gateway led to cooling and shoaling of thermocline in tropical Indian Ocean)

Karas, C., D. Nurnberg, R. Tiedemann & D. Garbe-Schonberg (2011)- Pliocene Indonesian Throughflow and Leeuwin Current dynamics: implications for Indian Ocean polar heat flux. Paleoceanography 26, PA2217, p. 1-9.
(Planktonic foraminifera reflect Pliocene hydrography of W tropical Indian Ocean (Site 709C) and Leeuwin Current in E subtropical Indian Ocean (Site 763A) in response to Indonesian Gateway dynamics. Indonesian Throughflow and warm S-flowing Leeuwin Current off W Australia are essential for polar heat transport in Indian Ocean. During 3.5-3 Ma, sea surface T Leeuwin Current area 2-3°C cooler than rather unchanged sea surface T from tropical Indian Ocean, probably induced by tectonically reduced surface Throughflow)

Kawamura, H., A. Holbourn & W. Kuhnt (2006)- Climate variability and land-ocean interactions in the Indo-Pacific Warm Pool: a 460-ka palynological and organic geochemical record from the Timor Sea. Marine Micropaleontology 59, 1, p. 1-14.
(Climatic conditions in W Timor Sea and adjacent NW Australia reconstructed for last 460 ka from IMAGES Core MD01-2378. Reduced precipitation and elevated productivity characterize glacial stages. Long-term reduction in precipitation over last 320 ka in two steps at ~300 ka and 180 ka BP. Paleoproductivity and paleoclimate appear to be related to precession-controlled Australian monsoon system)

Khider, D. (2011)- Paleoceanography of the Indonesian Seas over the past 25,000 years. Ph.D. Thesis University of Southern California, p. 1-233.

Konecky, B., J. Russell & S. Bijaksana (2016)- Glacial aridity in central Indonesia coeval with intensified monsoon circulation. Earth Planetary Science Letters 437, p. 15-24.
(open manuscript online at: https://www.sciencedirect.com/science/article/am/pii/S0012821X15008006)
(Last Glacial Maximum was cool and dry over Indo-Pacific Warm Pool region. Pervasive aridity and reduced rainfall coincided with apparent increase in circulation intensity in IPWP)

Krebs, U., W. Park & B. Schneider (2011)- Pliocene aridification of Australia caused by tectonically induced weakening of the Indonesian throughflow. Palaeogeogr. Palaeoclim. Palaeoecology 309, p. 111-117.

(Climate model to test response of climate to E-M-Pliocene tectonic changes, which constricted and uplifted passages between New Guinea and Sulawesi. Associated changes in Indonesian throughflow influenced amount of heat transported from Pacific to Indian Ocean and contributed to Pliocene climate change of Indo-Pacific)

Kuenen, P.H. (1939)- Sediments of the East Indian Archipelago. In: P.D. Trask (ed.) Recent marine sediments: a symposium, AAPG/ Society for Sedimentary Geology (SEPM), Tulsa, Special Publ. 4, p. 348-355.
(Sediments of Indonesian Archipelago vary greatly in different areas. In shallow Java Sea relatively fine-grained and rich in volcanic debris on S side near Java, relatively coarse-grained and quartz-rich on N side near Borneo. Deep water sediments generally low in carbonate, mainly due to relatively high % terrigenous debris. Calcium carbonate decreases with depth from ~50% in water <500m deep to <5% for water >5000m deep. Sediments of Kau Bay contain H_2S and FeS; also rich in organic matter and black in color, suggesting condition of stagnation in this bay (500m deep and shallow connection with sea)

Kuenen, P.H. (1942)- Bottom samples, Section I: Collecting of the samples and some general aspects. In: Scientific results of the Snellius Expedition in the Eastern part of the Netherlands East Indies (1929-1930), vol. 5. Geological Results, 3, 1, Brill, Leiden, p. 1-46.
(online at: https://www.delpher.nl/nl/boeken/ etc.)

Kuenen, P.H. (1948)- Het gehalte aan kalk en organische stof van de Indische diepzee-afzettingen. Handelingen 28e Nederlandsch Natuur- Geneeskundig Congres, Utrecht 1946, p. 258-259.
('The lime and organic content of Indies deep sea deposits')

Kuenen, P.H. (1948)- Influence of the earth's rotation on ventilation currents of the Moluccan deep-sea basins. Proc. Koninklijke Nederlandse Akademie van Wetenschappen, Amsterdam 51, 4, p. 417-426.
(online at: https://dwc.knaw.nl/DL/publications/PU00018509.pdf)
(Oxygen content of bottom water suggests currents ventilating Celebes Sea- Banda Sea deep-sea basins deflected by Coriolis force. N of equator the currents are forced to right, S of equator to left)

Kuenen, P.H. (1950)- Marine Geology. John Wiley, New York, p. 1-568.
(online at: https://ia800501.us.archive.org/23/items/marinegeology030411mbp/marinegeology030411mbp.pdf)
(General textbook on marine geology, with many examples from Indonesian waters, incl. Chapter 3, 'The Indonesian deep-sea depressions' (p. 175-209), and discussions of formation of coral reefs, ancient river courses on Sunda Shelf (Fig. 203), etc. ('Pre-plate tectonics' discussions of origins of seas and continents; Kuenen skeptical of Wegener's continental drift theory; JTvG))

Kuhnt, W., A. Holbourn, R. Hall, M. Zuvela & R. Kase (2004)- Neogene history of the Indonesian Throughflow. In: P. Clift et al. (eds.) Continent-ocean interactions within East Asian marginal seas, American Geophysical Union (AGU), Geophysical Monograph Series 149, p. 299-318.
(online at: http://searg.rhul.ac.uk/pubs/kuhnt_etal_2004%20Neogene%20Indonesian%20throughflow.pdf)
(Early evolution of Indonesian Gateway characterized by tectonic restriction of deep water pathway between Pacific and Indian Oceans at ~25 Ma. By E Miocene already closed as deep water pathway)

Kusnida, D. (2009)- Occurrence of phillipsite mineral in sub-seafloor of Roo Rise- Indian Ocean: a tectonic erosion synthesis. Indonesian Mining J. 12, 1, p. 23-27.
(online at: http://jurnal.tekmira.esdm.go.id/index.php/imj/article/view/573/435)
(Phillipsite at 30-30.3m in core from Indian Ocean seafloor S of W Timor at 3884m water depth. Marks hiatus between Eocene and Late Miocene nannoplankton-rich marls, possibly related to volcanic activity)

Kuswardani, R.T.D. & F. Qiao (2014)- Influence of the Indonesian Throughflow on the upwelling off the east coast of South Java. Chinese Science Bull. 59, 33, p. 4516-4523.
(online at: https://www.sciengine.com/doi/10.1007/s11434-014-0549-2)
(Wave-tide-circulation model used to simulate upwelling off S coast of Java. Strongest vertical velocity at ~80m depth. Upwelling off W Java has seasonal variability, but steady and strong off E Java. Wind not dominant for upwelling off S part E Java. Indonesian Throughflow probably accounts for ~60% of E Java upwelling)

Larasati, O.D.D., M. Hendrizan, R. Rachmayani & G. Napitupulu (2024)- Variability of sea surface temperature and salinity in Makassar Strait during the Last Glacial Maximum.Bulletin of the Marine Geology 39, 2, p. 111-121.
(online at: https://ejournal.mgi.esdm.go.id/index.php/bomg/article/view/882/641)
(Reconstruction of sea surface temperature and salinity from core at two SONNE 217 sites in Makassar Straits, for Late Pleistocene interval from 25,000–18,000 years ago, in area of Indonesian Throughflow. Temperature during the LGM reach the minimum around ~20 ka BP and was ~2-3 °C lower than in Late Holocene)

Lee, T., I. Fukumori, D. Menemenlis, Z.F. Xing & L.L. Fu (2002)- Effects of the Indonesian Throughflow on the Pacific and Indian Oceans. J. Physical Oceanography 32, p. 1404-1429.
(online at: https://journals.ametsoc.org/doi/pdf/10.1175/1520-0485%282002%29032%3C1404%3 Etc.)
(Circulation modeling to investigate effects of Indonesian Throughflow on circulation and thermal structure of Pacific and Indian Oceans. Blockage of ITF cuts off heat transport from Pacific to Indian Ocean, causing overall warming deepening and shoaling of thermocline in tropical Pacific and cooling and shoaling of thermocline in S Indian Ocean)

Li, D., T.L. Chiang, S.J. Kao, Y.C. Hsin, L.W. Zheng, J.Y. Terence Yang, S.C. Hsu, C.R. Wu & M. Dai (2017)- Circulation and oxygenation of the glacial South China Sea. J. Asian Earth Sciences 138, p. 387-398.
(online at: https://phyoce.es.ntnu.edu.tw/pdf/JAES_Circulation%20and%20oxygenation%20of%20the%20glacial%20South%20China%20Sea.pdf)

Li, Q., B. Li, G. Zhong, B. McGowran, Z. Zhou, J. Wang & P. Wang (2006)- Late Miocene development of the western Pacific warm pool: planktonic foraminifer and oxygen isotopic evidence. Palaeogeogr. Palaeoclim. Palaeoecology 237, p. 465-482.
(Disappearance at ~10 Ma of Globoquadrina dehiscens from W Pacific and S China Sea, increase in warm-water species, decrease in deepwater species and evidence of sea surface warming and deepened local thermocline interpreted as early development of W Pacific warm pool. Late Miocene warm pool became paleobiologically detectable from ~10 Ma, but modern warm pool did not appear until ~4 Ma, in M Pliocene)

Li, Z., X. Shi, M.T. Chen, H. Wang, S. Liu, J. Xu, H. Long, R.A. Troa, R. Zuraida & E. Triarso (2016)- Late Quaternary fingerprints of precession and sea level variation over the past 35 kyr as revealed by sea surface temperature and upwelling records from the Indian Ocean near southernmost Sumatra. Quaternary International 425, p. 282-291.
(Paleoclimate reconstructions from core SO184-10043 offshore southernmost Sumatra, 2171m water depth)

Linsley, B.K. (1991)- Carbonate sedimentation in the Sulu Sea linked to the onset of Northern Hemisphere glaciation, 2.4 Ma. In: E.A. Silver at al. (eds.) Proc. Ocean Drilling Program (ODP), Scientific Results, 124, p. 375-378.
(online at: www-odp.tamu.edu/publications/124_SR/VOLUME/CHAPTERS/sr124_28.pdf)
(Sulu Sea ODP Sites 768 and 769 currently above carbonate compensation depth (4800 m), in deep marine silled basin. Pliocene- Pleistocene sediments with common pelagic material, but no pelagic carbonate before 2.4 Ma. Timing of increase in carbonate accumulation constrained by Gauss/Matuyama paleomagnetic reversal and coincides with onset of N Hemisphere glaciation at 2.4 Ma. Not clear if increase in carbonate accumulation at 2.4 Ma is due to productivity changes, preservation changes, or combination of two)

Linsley, B.K., Y. Rosenthal & D.W. Oppo (2010)- Holocene evolution of the Indonesian Throughflow and the western Pacific warm pool. Nature Geoscience 3, 8, p. 578-583.
(online at: https://marine.rutgers.edu/pubs/private/Holocene%20WPWP-ITF_N.Geo2010_w_SOM.pdf)
(Sediment cores from across Indonesian Throughflow area suggest that from ~10,000 to 7000 years ago, (Holocene Climate Optimum) sea surface T in western W Pacific warm pool ~0.5 °C higher than during pre-industrial times. About 9500 years ago, when South China and Indonesian seas connected by rising sea level, surface waters in Makassar Strait became relatively fresher)

Linsley, B.K., R.C. Thunell, C. Morgan & D.F. Williams (1985)- Oxygen minimum expansion in the Sulu Sea, western equatorial Pacific, during the last glacial low stand of sea level. Marine Micropaleontology 9, p. 395-418.
(Sulu Sea deep silled, dysaerobic basin, ventilated through single sill at 420m depth to China Sea. Increases in planktonic foraminifera Neogloboquadrina dutertrei and Ng. pachyderma and light d18 O values suggest reduced surface water salinities during last glacial maximum, with expansion of mid-water oxygen minimum layer and increased organic carbon preservation at mid-water depths at this time. Oridorsalis umbonatus dominant benthic foram species between water depths of 2000-4200m. Bolivina robusta found only in oxygen minimum zone at 1700 m and in zone of oxygen depletion in deep part of basin. Below 4000 m, bottom waters maintained some degree of oxygenation during last glacial maximum. Radiolarians 3-8% of fauna at water depths <4000 m, gradually increasing in abundance to >50% below 4500 m)

Lowemark, L., C.H. Chen, C.A. Huh, T.Q. Lee, Y.P. Ku et al. (2004)- Biogenic reworking of tephra layers in the South China Sea (core MD972142) and the Celebes Sea (core MD012388). Berita Sedimentologi 19, p. 31-41.
(online at: https://journal.iagi.or.id/index.php/FOSI/article/view/226)
(Discrete traces such as Scolicia, Thalassinoides and Zoophycos account for significant redistribution of material in tephra layers (10s of cm or more). Deep-reaching burrows may be serious threat to high-resolution stratigraphy)

Luo, C., G. Lin, M. Chen, R. Xiang, L. Zhang, Liu, A. Pan, S. Yang & M. Yang (2016)- Characteristics of pollen in surface sediments from the southern South China Sea and its paleoclimatic significance. Palaeogeogr. Palaeoclim. Palaeoecology 461, p. 12-28.
(Pollen-spores from 62 seafloor sediments of southern Sh China Sea dominated by trilete spores (from ferns). Most pollen and spores on Kalimantan Island coast from herbaceous plants and trees, with few trilete spores)

Martinez, J.I., P. De Deckker & T.T. Barrows (1999)- Palaeoceanography of the last glacial maximum in the eastern Indian Ocean: planktonic foraminiferal evidence. Palaeogeogr. Palaeoclim. Palaeoecology 147, p. 73-99.
(online at: https://www.academia.edu/16724209/Palaeoceanography_of_the_last_glacial_maximum_in_the_eastern_Indian_Ocean_planktonic_foraminiferal_evidence)
(Palaeoceanographic conditions in E Indian Ocean for the last ~30 kyr, from planktonic foraminiferal analyses. Increase during last glacial maximum (LGM) of foraminiferal fragmentation resulting from more productive Java upwelling system and/or more corrosive Antarctic Intermediate Water at intermediate water depths (~1000 m). During LGM decrease in % of shallow-dwelling and symbiont-bearing planktonic foraminifera, increase in % upwelling-related species (Globorotalia cultrata, Neogloboquadrina dutertrei), Etc.)

Maryunani, Khoiril Anwar (2009)- Microfosil approach based on Cendrawasih Bay data, to interpreting and reconstructing Equatorial Western Pacific paleoclimate since Last Glacial (Late Pleistocene). Doktoral Dissertation Institut Teknologi Bandung (ITB), p. 1-141. *(Unpublished)*

Metzger, E.J., H.E. Hurlburt, X. Xub, J.F. Shriver, A.L. Gordon, J. Sprintall, R.D. Susanto & H.M. van Aken (2010)- Simulated and observed circulation in the Indonesian Seas: 1/12° global HYCOM and the INSTANT observations. Dynamics of Atmospheres and Oceans 50, p. 275-300.
(Simulated total Indonesian Throughflow (-13.4 Sv) is similar to observational estimate (-15.0 Sv) and distributed among three outflow passages (Lombok Strait, Ombai Strait and Timor Passage). Makassar Strait carries ~75% of observed total ITF inflow. Wide and shallow Java and Arafura Seas carry -0.8 Sv of inflow)

Meyers, G. (1996)- Variations of Indonesian Throughflow and the El Nino-Southern Oscillation. J. of Geophysical Research 101, C5, p. 12255-12263.

Meyers, G., R. Bailey & A. Worby (1995)- Geostrophic transport of Indonesian throughflow. Deep Sea Research I, 42, 7, p. 1163-1174.

(Indonesian Throughflow measured for 6 years. Mean relative throughflow-transport 5 million m3/s. Maximum net relative transport to W between Australia and Indonesia is 12 Sv, in August/September. Amplitude and phase of annual signal vary considerably within Indonesian region

Middelburg, J.J., G.J. de Lange & R. Kreulen (1990)- Dolomite formation in anoxic sediments of Kau Bay, Indonesia. Geology (GSA) 18, 5, p. 399-402.
(Authigenic dolomite layers in organic matter-rich sediments of Kau Bay, Halmahera. Dolomite formation related to anaerobic decomposition of organic matter. Rate of dolomite formation controlled by supply of calcium and around few cm/ 1000 years)

Middelburg, J.J. (1991)- Organic carbon, sulphur, and iron in Recent semi- euxinic sediments of Kau Bay, Indonesia. Geochimica Cosmochimica Acta 55, 3, p. 815-828.
(Kau Bay in NE Halmahera, E Indonesia, is 470 m deep basin, separated from Pacific Ocean by sill at 40m below sea-level. During Weichselian time, sea-level dropped below sill depth and freshwater sediments were deposited, rich in organic matter with terrigenous isotope characteristics and also rich in sulfur)

Mohtadi, M., L. Max, D. Hebbeln, A. Baumgart, N. Kruck & T. Jennerjahn (2007)- Modern environmental conditions recorded in surface sediment samples off W and SW Indonesia: planktonic foraminifera and biogenic compounds analyses. Marine Micropaleontology 65, 1, p. 96-112.
(Study of planktonic foraminifera in surface sediment samples from fore-arc basins in W and SW Indonesian Archipelago. Present-day oceanography and marine productivity reflected in tropical to subtropical and upwelling assemblages of planktonic foraminifera in surface sediments. Opal in surface sediments corresponds to upwelling-driven increased marine productivity)

Mohtadi, M., D.W. Oppo, A. Luckge, R. DePol-Holz, S. Steinke, J. Groeneveld et al. (2011)- Reconstructing the thermal structure of the upper ocean: insights from planktic foraminifera shell chemistry and alkenones in modern sediments of the tropical eastern Indian Ocean. Paleoceanography 26, PA3219, p. 1-20.
(online at: http://onlinelibrary.wiley.com/doi/10.1029/2011PA002132/pdf)
(Shell chemistry of planktic foraminifera in 69 seafloor samples in E Indian Ocean off W and S Indonesia)

Mohtadi, M., D.W. Oppo, S. Steinke, J.W. Stuut, R. De Pol-Holz, D. Hebbeln & A. Luckge (2011)- Glacial to Holocene swings of the Australian-Indonesian monsoon. Nature Geoscience 4, p. 540-544.
(online at: http://www.stuut.tv/Mohtadi_et_al_2011.pdf)
(Planktonic foraminiferal oxygen isotopes and faunal composition in sediments offshore S Java show glacial-interglacial variations in Australian-Indonesian winter monsoon in phase with Indian summer monsoon system. Australian-Indonesian summer and winter monsoon variability closely linked to summer insolation and abrupt climate changes in N hemisphere (on Indian Ocean side of volcanic arcs of Sumatra and Java, wetter conditions during Last Glacial Maximum compared to mid-Holocene. Indian Ocean was only moisture source during times of an emerged Sunda Shelf during glacials))

Mohtadi, M., M. Prange, E Schefuss & T.C. Jennerjahn (2017)- Late Holocene slowdown of the Indian Ocean Walker circulation. Nature Communications 8, 1015, p. 1-8.
(online at: https://www.nature.com/articles/s41467-017-00855-3.pdf)
(Climate proxies in E Indian Ocean sediment cores off W and S Sumatra and S Java. During Last Glacial Maximum increased thermocline depth and rainfall, indicating stronger-than-today Walker circulation)

Mohtadi, M., S. Steinke, J. Groeneveld, H.G. Fink, T. Rixen, D. Hebbeln, B. Donner & B. Herunadi (2009)- Low-latitude control on seasonal and interannual changes in planktonic foraminiferal flux and shell geochemistry off south Java: a sediment trap study. Paleoceanography 24, 1, PA1201, p. 1-20.
(online at: http://onlinelibrary.wiley.com/doi/10.1029/2008PA001636/epdf)
(Planktonic foraminifera primary production rates in Indian Ocean off S Java highest during SE monsoon-induced coastal upwelling period in July- October, with Globigerina bulloides, Neogloboquadrina pachyderma (d) and Globigerinita glutinata 40% of total fauna. Habitats of 0-30m for G. ruber (mixed layer depth); 60-80m

for P. obliquiloculata and 60-90m for N. dutertrei (upper thermocline depth); and 90-150 m for G. menardii (lower thermocline depth))

Mohtadi, M., S. Steinke, A. Luckge, J. Groeneveld & E.C. Hathorne (2010)- Glacial to Holocene surface hydrography of the tropical eastern Indian Ocean. Earth Planetary Science Letters 292, 1-2, p. 89-97.

Molcard, R., M. Fieux & A.G. Ilahude (1996)- The Indo-Pacific throughflow in the Timor Passage. J. of Geophysical Research: Oceans 101, C5, p. 12411-12420. *(online at: www.researchgate.net/publication/243786570_The_Indo-Pacific_Throughflow_in_the_Timor_Passage)*
(Current meter moorings in 1992-1993 between Roti island and Ashmore Reef recorded mean Pacific water transport of 3.4-5.3 Sv (1 Sv = 106 m3/s) to Indian Ocean through Timor Passage. Unexpected deep flow toward Indian Ocean between 500- 1550m)

Molcard, R., M. Fieux, J.C. Swallow, A.G. Ilahude & J. Banjarnahor (1994)- Low frequency variability of the currents in Indonesian channels (Savu-Roti and Roti-Ashmore Reef). Deep-Sea Research I, 41, 11/12, p. 1643-1661.

Molcard, R.M., M. Fieux & F. Syamsudin (2001)- The throughflow within Ombai Strait. Deep Sea Research I, 48, 5, p. 1237-1253.
(online at: https://www.academia.edu/29001193/The_throughflow_within_Ombai_Strait)
(Current meter mooring in 1995 in Ombai Strait, one of the deep connections between Pacific Ocean and Indian Oceans. Mean transport estimated at 4-6 Sverdrup (Sv) towards Savu Sea. Mean currents in upper 200 m five times higher than that below)

Molengraaff, G.A.F. (1921)- Modern deep-sea research in the East Indian archipelago. Geographic J. 57, 2, p. 95-121.
(online at: https://ia600708.us.archive.org/view_archive.php?archive=/28/items/crossref-pre-1923-scholarly-works/10.2307%252F1781543.zip&file=10.2307%252F1781559.pdf)
(Overview of oceanographic work in Indonesia, deep sea basins bathymetry, Sunda shelf seas with drowned river systems and barrier reefs, etc.)

Morey, S.L., J.F. Shriver & J.J. O'Brien (1999)- The effects of Halmahera on the Indonesian Throughflow. J. of Geophysical Research 104, C10, p. 23281-23296.
(Modeling of Indonesian throughflow. Predominant throughflow pathway North Pacific (NP) water traveling through Celebes Sea, Makassar Strait, Flores Sea, and to Indian Ocean through Timor, Savu, and Lombok Straits Halmahera prevents flow of South Pacific (SP) water into Celebes Sea and diverts some SP water S-ward through Seram and Banda Seas)

Murgese, D.S. & P. De Deckker (2007)- The Late Quaternary evolution of water masses in the eastern Indian Ocean between Australia and Indonesia, based on benthic foraminifera faunal and carbon isotopes analyses. Palaeogeogr. Palaeoclim. Palaeoecology, 247, p. 382-401.
(Paleoceanographic evolution of E Indian Ocean At 60-35 kyr BP (ka) higher productivity than today at Banda Sea surface. Last Glacial Maximum reduction of deep-water circulation in E Indian Ocean, with more active circulation at intermediate depths. At 15-5 ka reduction in productivity over Banda Sea related to increased atmospheric precipitation with low-salinity water cap. From 5 ka- Present: W Australian coast increased influence of oxygen-depleted Indonesian Intermediate Water)

Murgese, D.S. & P. De Deckker, M.I. Spooner & M. Young (2007)- A 35,000 year record of changes in the eastern Indian Ocean offshore Sumatra. Palaeogeogr. Palaeoclim. Palaeoecology, 265, p. 195-213.
(Core in 2034m of water off S Sumatra. Micropaleontological proxies used to reconstruct conditions over last 35,000 years. Marine isotopic stage 3 sharper thermocline than today, shallower and absence of low-salinity 'barrier layer' from high monsoonal rains. Deglaciation marked by change in surface salinity and progressive alteration of thermocline with less productive deep chlorophyll maximum. Monsoonal activity commenced

around 15 ky. Holocene marked by increase in river discharge to ocean, pulsed by delivery of organic matter to sea floor. No obvious and persistent upwelling conditions off Sumatra for last 35,000 years)

Murray, J. & E. Philippi (1908)- Die Grundproben der Deutschen Tiefsee Expedition. In: Wissenschaftliche Ergebnisse der Deutschen Tiefsee-Expedition auf dem Dampfer "Valdivia" 1898-1899, Fischer, Jena, 10, p. 79-206.
(online at: https://epic.awi.de/id/eprint/39683/1/VALDIVIA-TiefseeExp.pdf)
('The seafloor samples of the German Deep Sea Expedition (SS Valdivia, 1898-1899)'. Incl. samples from Indian Ocean off Sumatra, mainly Globigerina oozes, many with volcanic detritus. Red clays below 4700m)

Murray, S.P. & D. Arief (1988)- Throughflow into the Indian Ocean through the Lombok Strait, January 1985-January 1986. Nature 333, 6172, p. 444-447.
(Current meter observations support existence of large throughflow of elevated temperature/ depressed salinity of water, which has critical role in heat and freshwater balance of Indian Ocean)

Murray, S.P., D. Arief & J.C. Kindle (1990)- Characteristics of circulation in an Indonesian archipelago strait from hydrography, current measurements and modeling results. In: L. Pratt (ed.) The physical oceanography of sea straits, Kluwer Academic Publishers, p. 3-23.

Murty, S.A., N.F. Goodkin, H. Halide, D. Natawidjaja, B. Suwargadi, I. Suprihanto, D. Prayudi, A.D. Switzer & A.L. Gordon (2017)- Climatic influences on southern Makassar Strait salinity over the past century. Geophysical Research Letters 44, 23, p. 11967-11975.
(online at: http://onlinelibrary.wiley.com/doi/10.1002/2017GL075504/epdf)
(Record of sea surface salinity in S Makassar Strait from 1927 to 2011, based on Porites coral δ18O from Doangdoangan Besar island. East Asian Winter Monsoon drives less saline surface waters from S China Sea into the Makassar Strait, obstructing surface Indonesian Throughflow, and strongly influences interannual sea surface salinity variability during boreal winter over 20th century)

Nathan, S.A. & R.M. Leckie (2003)- The Western Pacific warm pool: a probe of global sea level change and Indonesian Seaway closure during the Middle to Late Miocene, AAPG Annual Convention, Salt Lake City, p. 1-6.
(online at: www.searchanddiscovery.com/documents/abstracts/annual2003/extend/77605.PDF)
(Development of West Pacific Warm Pool linked with restriction of surface water flow through Indonesian Seaway. Preliminary results suggest Seaway narrowed during Middle to Late Miocene, ~11.5- 8.5 Ma)

Nathan, S.A. & R.M. Leckie (2009)- Early history of the Western Pacific Warm Pool during the Middle to Late Miocene (~13.2- 5.8 Ma): role of sea-level change and implications for equatorial circulation. Palaeogeogr. Palaeoclim. Palaeoecology 274, p. 140-159.
('Proto-warm pool' suggested at ODP Site 806 (Ontong Java Plateau, W Equatorial Pacific), between 13.2-5.8 Ma by planktonic foraminifera isotope ratios and census data. Caused by progressive tectonic constriction of Indonesian Seaway and modulated by sea level fluctuations. Two-step proto-warm pool development: ~11.6-10 Ma, coinciding with Miocene isotope events Mi5 and Mi6 and sea-level lowstands. Proto-warm pool weakening after ~10 Ma. Resurgence of later proto-warm pool at ~6.5-6.1 Ma)

Nathan, S.A. & R.M. Leckie (2013)- The South China Sea: proto-warm pool development and the East Asian monsoon. In: Geologic problem solving with microfossils III Conf., Houston 2013. *(Extended Abstract)*
(Planktic foraminifera and stable isotopes from ODP Sites 806 (Ontong Java Plateau), 1146 (northern S China Sea), and 1143 (southern S China Sea) suggest M-L Miocene changes tied to constriction of Indonesian Seaway, etc. Eustatic changes of late M Miocene to early Late Miocene contributed to initiation of proto-warm pool from ~12.5 Ma- ~9.0 Ma)

Neeb, G.A.A. (1942)- Bottom samples, Section II: The composition and distribution of the samples. In: The Snellius Expedition in the eastern part of the Netherlands East Indies (1929-1930), 5. Geological Results, 3, 1, Brill, Leiden, p. 55-268.

(online at: https://www.delpher.nl/nl/boeken/ Etc.)
(With 1:4M scale map of East Indonesia seafloor sediment types)

Newton, A., R. Thunell & L. Stott (2011)- Changes in the Indonesian Throughflow during the past 2000 yr. Geology (GSA) 39, 1, p. 63-66.
(online at: http://earth.usc.edu/~stott/stott_papers/Newton%20Thunell%20Stott%20Geology%20%202010.pdf)
(Mg/Ca and O-isotope compositions of planktonic foram Globigerinoides ruberin corres from N and S ends of Makassar Strait used to reconstruct surface-water temperature and salinity over past 2000 yr. Maximum T and salinity between 850-700 yr ago (Medieval Solar Maximum) and ~1000-700 yr ago (Medieval Warm Period)

Nitzsche, M. (1989)- Submarine slope instability, eastern Banda Sea. In: J.E. van Hinte et al. (eds.) Proc. Snellius II Symposium, Jakarta 1987, Netherlands J. of Sea Research 24, 4, p. 431-436.
(Seismic profiles in E Banda Sea area show evidence of several slumping- sliding events. High potential for slope failures in Banda Sea area due to high seismicity, steep submarine slopes and soft sediment deposits, especially below 1000m water depth)

O'Driscoll, K.T.A. (2008)- A three-dimensional regional model of the Indonesian Seas circulation. VDM Verlag, p. 1-176.

Pang, X., F. Bassinot & S. Sepulcre (2021)- Indonesian Throughflow variability over the last two glacial-interglacial cycles: Evidence from the eastern Indian Ocean. Quaternary Science Reviews 256, 106839, p.

Pariwono, J.I., A.G. Ilahude & M. Hutomo (2005)- Progress in oceanography of the Indonesian seas. A historical perspective. Oceanography 18, 4, p. 42-49.
(online at: https://tos.org/oceanography/assets/docs/18-4_pariwono.pdf)
(Brief history of oceanography research in Indonesia since colonial period)

Petrick, B., A. Martínez-García, G. Auer, L. Reuning, A. Auderset, H. Deik, H. Takayanagi et al. (2019)- Glacial Indonesian Throughflow weakening across the Mid-Pleistocene climatic transition. Nature Scientific Reports 9, 16995, p. 1-13.
(online at: https://www.nature.com/articles/s41598-019-53382-0.pdf)
(Sea surface T and aridity records from W coast of Australia (IODP Site U1460). MPT represents transition in global climate between 1.25 and 0.6 Ma, characterized by intensification of ice ages and change in periodicity of glacial/interglacial cycles from 41 ky to quasi-100 ky. Glacial coolings at 1.55 and 0.65 Ma best explained by restriction/weakening of Indonesian Throughflow as consequence of global sea level and tectonic changes. Restrictions of ITF infuenced global ocean circulation and hydrological cycle in W Australia)

Postma, H. & W.G. Mook (1988)- The transport of water through the East Indonesian deep sea water. In: J.E. van Hinte et al. (eds.) Proc. Snellius II Symposium, Jakarta 1987, Netherlands J. of Sea Research 22, p. 373-381.
(Overall flow of deep water from Pacific to Indian Ocean flushes deep E Indonesian basins)

Pratawi, F.R., S. Hadisusanto, L. Gustiantini, N. Nurdin & M. Yosi (2020)- Keterkaitan perubahan iklim pada glasial akhir Holosen terhadap tingkat keanekaragaman foraminifera di Laut Halmahera. J. Geologi Kelautan 18. 1, p. 1-10.
(online at: https://core.ac.uk/download/328108929.pdf)
('Correlations of climate change in the last Glacial- Holocene to the variation of foraminifera in the Halmahera Sea'. Foraminifera and paleoclimate trends in Late Quaternary sediment core MD10-3339 in 1919m water depth, SE of Halmahera)

Qu, T., Y. Du, J. Strachan, G. Meyers & J. Slingo (2005)- Sea surface temperature and its variability in the Indonesian region. Oceanography 18, 4, p. 50-61.
(online at: https://tos.org/oceanography/assets/docs/18-4_qu.pdf)

Qu, T., H. Mitsudera & T. Yamagata (2000)- Intrusion of the North Pacific waters into the South China Sea. J. of Geophysical Research- Oceans 105, C3, p. 6415-6424.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/10.1029/1999JC900323)

Rai, A.K., V.K. Pathak, L.K. Sharma & A. Hussain (2017)- Pliocene Indonesian Throughflow change and planktic foraminiferal diversity in the eastern subtropical Indian Ocean. Current Science 113, 5, p. 955-959.
(online at: https://www.currentscience.ac.in/Volumes/113/05/0955.pdf)
(Significant decline in faunal diversity in ODP sites 762-763 (near Exmouth Plateau in SE Indian Ocean) at ~3.5- 3 Ma (beginning of Late Pliocene). Suggested to reflect lower T and increase in surface water productivity possibly due to less influence of Indonesia Throughflow waters in E Indian Ocean as consequence of significant constriction of Indonesian Seaway)

Rosenfield, D., V. Kamenkovich, K.O'Driscoll & J. Sprintall (2010)- Validation of a regional Indonesian Seas model based on a comparison between model and INSTANT transports. Dynamics of Atmospheres and Oceans 50, 2, p. 313-330.
(Program of current measurements through five Indonesian Seas passages (Labani Channel in Makassar Straits, Lifamatola Passage, Lombok Strait, Ornbai Strait, and Timor Passage), over 3-years (2004-2006))

Sato, K., M. Oda, S. Chiyonobu, K. Kimoto, H. Domitsu & J.C. Ingle (2008)- Establishment of the western Pacific warm pool during the Pliocene: evidence from planktic foraminifera, oxygen isotopes and Mg/Ca ratios. Palaeogeogr. Palaeoclim. Palaeoecology 265, p. 140-147.
(Planktonic foraminifera from W Pacific Ocean sites DSDP 292 (N margin) and ODP 806 (near center of modern West Pacific Warm Pool). Between 8.5-4.4 Ma Site 806 overlain by warm surface water but not Site 292. N-ward expansion of WPWP from 4.4-3.6 Ma and establishment of modern WPWP by 3.6 Ma related to closure of Indonesian and Central American seaways)

Schiller, A., S.E. Wijffels & J. Sprintall (2007)- Variability of the Indonesian Throughflow: a review and model-to-data comparison. Elsevier Oceanography Series 73, Chapter 8, p. 175-209, p. 484-494.
(Review of short-term variations in throughflow)

Schiller, A., S.E. Wijffels, J. Sprintall, R. Molcard & P.R. Oke (2010)- Pathways of intraseasonal variability in the Indonesian Throughflow region. Dynamics Atmospheres Oceans 50, 2, p. 174-200.
(Indonesian Throughflow provides low-latitude pathway for transfer of warm, low salinity Pacific waters into Indian Ocean. Primary ITF source is N Pacific thermocline water, flowing through Makassar Strait (sill depth of 650m at Dewakang Sill) and exiting into E Indian Ocean through passages along Lesser Sunda Island chain at Ombai Strait, Lombok Strait and Timor Passage. Recent flow measurements show variability patterns)

Schneider, N. (1998)- The Indonesian Throughflow and the global climate system. J. Climate 11, 4, p. 676-689.
(Modeling role of Indonesian Throughflow on world climate)

Schroder, J.F., A. Holbourn, W. Kuhnt & K. Kussner (2016)- Variations in sea surface hydrology in the southern Makassar Strait over the past 26 kyr. Quaternary Science Reviews 154, p. 143-156.
(Sea surfaceT and O-isotopes in sediment core from Mandar Bay, S Makassar Strait, reflect Indonesian climate over past 26 kyr)

Schroder, J.F., W. Kuhnt, A. Holbourn, S. Beil, P. Zhang, M. Hendrizan & J. Xu (2018)- Deglacial warming and hydroclimate variability in the Central Indonesian Archipelago. Paleoceanography and Paleoclimatology (AGU) 33, p. 974-993.
(Quaternary sea surface temperature and O-isotopes changes from Celebes Sea, Makassar Strait, Flores Sea, and NW Banda Sea over the past 25 kyr. Deglacial warming generally gradual with amplitude of 3-4 °C. Onset of deglacial sea surface warming in tropical Indonesian Sea earlier than global atmospheric CO_2 rise. O-isotopic data do not support widespread aridity in C Indonesia during last glacial period, as suggested by earlier land records)

Setiawan, R.Y. (2015)- The role of the Sunda Strait in the glacial to Holocene development of the eastern tropical Indian Ocean hydrography. Doct. Thesis Universitat Bremen, p. 1-109.
(online at: https://elib.suub.uni-bremen.de/edocs/00104747-1.pdf)
(Sea surface conditions derived from sediment cores in Indian Oean S of Sunda Strait cooler and saltier during Last Glacial compared to Holocene. Holocene sea surface warmer and fresher conditions, particularly after opening of Sunda Strait at ~10 ka due to transport of low salinity water from Java Sea via Sunda Strait)

Setiawan, R.Y., M. Mohtadi, J. Southon, J. Groeneveld, S. Steinke & D. Hebbeln (2015)- The consequences of opening the Sunda Strait on the hydrography of the eastern tropical Indian Ocean. Paleoceanography 30, 10, p. 1358-1372.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/pdf/10.1002/2015PA002802)
(Advection of relatively fresh Java Sea water through Sunda Strait presently responsible for low-salinity tongue in E Indian Ocean with salinities as low as 32‰. During last glacial period Sunda Shelf was exposed and advection via Sunda Strait was cut off. Sediment cores from E tropical Indian Ocean off Sunda Strait show lower T and higher δ18Osw during last glacial)

Song, Q. & A. Gordon (2004)- Significance of the vertical profile of Indonesian throughflow transport on the Indian Ocean. Geophysical Research Letters 31, L16307, p. 1-4.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2004GL020360)

Song, Q., A. Gordon & M. Visbeck (2004)- Spreading of the Indonesian throughflow in the Indian Ocean. J. Physical Oceanography 34, p. 772-792.
(online at: https://journals.ametsoc.org/doi/pdf/10.1175/1520-0485%282004%29034%3C0772%3ASOTITI%3E2.0.CO%3B2)
(In upper thermocline Indonesian Throughflow crosses Indian Ocean, from Makassar Strait to E coast of Africa, on time scale of ~10 yr and reaches Arabian Sea in >20 yr)

Song, Q., G.A. Vecchi & A.J. Rosati (2004)- The role of the Indonesian Throughflow in the Indo-Pacific climate variability in the GFDL coupled climate model. J. of Climate 20, p. 2434-2451.
(online at: http://journals.ametsoc.org/doi/pdf/10.1175/JCLI4133.1)
(Oceanic circulation model to study response of closure of Indonesian Throughflow on climate)

Sosdian, S.M. & C.H. Lear (2020)- Initiation of the Western Pacific Warm Pool at the Middle Miocene climate transition? Paleoceanography and Paleoclimatology (AGU) 35, 12, p. e2020PA003920, p.
(manuscript online at: https://core.ac.uk/download/pdf/341793046.pdf)
(Thermal history and changes in hydrology from Indo-Pacific region from 16.5-11.5 Ma. Across M Miocene Climate Transition (MMCT) at ~14 Ma, surface ocean T in Indo-Pacific cooled by ~2°C, synchronous with advance of Antarctic ice sheet. W Pacific Ocean warmed and E tropical Indian Ocean freshened after MMCT, likely due to constriction of Indonesian Seaway, reducing connectivity between Pacific and Indian Oceans)

Spooner, M.I., T.T. Barrows, P. De Deckker & M. Paterne (2005)- Palaeoceanography of the Banda Sea, and Late Pleistocene initiation of the Northwest Monsoon. Global and Planetary Change 49, 1-2, p. 28-46.
(Late Quaternary paleoceanography of Banda Sea based on core at 1805m bsl E of Timor, below pathway of Indonesian Throughflow. Site characterised by high surface T and high precipitation, forming low-salinity boundary layer. Minimal surface T cooling during last glacial maximum. Sea-surface seasonality never >3 °C. Abundance of Neogloboquadrina dutertrei, Neogloboquadrina pachyderma and Globigerinoides quadrilobatus indicates mixed layer (low-salinity boundary layer of Throughflow) thinned during Marine Isotope Stages 3 and 2. This enhanced deep chlorophyll maximum (DCM) layer. NW Monsoon 'switched on' at 15,000 kyr BP. This thickened mixed layer, reducing DCM, and increased SST seasonality in Banda Sea)

Sprintall, J., J. Chong, F. Syamsudin, W. Morawitz, S. Hautala, N. Bray & S. Wijffels (1999)- Dynamics of the South Java Current in the Indo-Australian basin, Geophysical Research Letters 26, 16, p. 2493-2496.
(S Java Current poorly understood boundary current, reversing to SE-ward flow semi-annually around May and November. June-October SE monsoon winds lead to upwelling of cold, salty water)

Sprintall, J., A.L. Gordon, A. Koch-Larrouy, T. Lee, J.T. Potemra, K. Pujiana & S.E. Wijffels (2014)- The Indonesian seas and their role in the coupled ocean-climate system. Nature Geoscience 7, p. 487-492.
(online at: http://aoe.scitec.kobe-u.ac.jp/~mdy/library/papers/Sprintalletal2014NG.pdf)
(Indonesian Throughflow from Pacific to Indian Ocean through series of narrow straits. Strong velocities at depths of ~100 m. Intense vertical mixing within Indonesian seas, resulting in net upwelling of thermocline water, lowering sea surface temperatures by ~0.5 °C. Throughflow slows and shoals during El Nino events)

Sprintall, J., A.L. Gordon, S.E. Wijffels, M. Feng, S. Hu, A. Koch-Larrouy, H. Phillips, D. Nugroho, A. Napitu, et al. (2019)- Detecting change in the Indonesian seas. Frontiers in Marine Science 6, 257, p. 1-24.
(online at: https://www.frontiersin.org/articles/10.3389/fmars.2019.00257/full)

Sprintall, J. & W.T. Liu (2005)- Ekman mass and heat transport in the Indonesian Seas. Oceanography 18, 4, p. 60-69.
(online at: https://tos.org/oceanography/assets/docs/18-4_sprintall.pdf)
(Discussion of Indonesian throughflow (ITF) of warm, relatively fresh waters into SE Indian Ocean from W Pacific Ocean via series of passages between islands of Indonesian archipelago and Australia. Flow from Banda Sea to Indian Ocean strongest during SE monsoon (July-September) when winds are to NW and surface waters are cooler. These winds result in lower sea level along S coast of Nusa Tenggara islands)

Sprintall, J., J.T. Potemra, S.L. Hautala, N.A. Bray & W. Pandoe (2003)- Temperature and salinity variability in the exit passages of the Indonesian Throughflow. Deep Sea Research 50, 12-13, p. 2183-2204.

Sprintall, J. & A. Revelard (2014)- The Indonesian Throughflow response to Indo-Pacific climate variability. J. of Geophysical Research: Oceans, 119, 2, p. 1161-1175.
(Indonesian Throughflow is only open pathway for interocean exchange between Pacific and Indian Ocean basins at tropical latitudes. ITF transport variability measured from remotely sensed altimeter data, with focus on outflow passages of Lombok, Ombai, and Timor. Strong interannual variability. Increased transport in the upper layer of Lombok Strait and all of Timor Passage likely related to enhanced Pacific trade winds. El Nino-Southern Oscillation variability strongest in Timor Passage)

Sprintall, J., S. Wijffels, R. Molcard & I. Jaya (2010)- Direct evidence of the South Java Current system in Ombai Strait. Dynamics Atmospheres Oceans 50, 2, p. 140-156.
(Velocity data from Ombai Strait N of Timor confirm E-ward flowing surface South Java Current and deeper Undercurrent cross Savu Sea to reach Ombai Strait, a main outflow portal of Indonesian Throughflow (ITF))

Srinivasan, M.S. & D.K. Sinha (1998)- Early Pliocene closing of the Indonesian Seaway: evidence from north-east Indian Ocean and tropical Pacific deep sea cores. J. Asian Earth Sciences 16, p. 29-44.
(Neogene planktic forams from NE Indian Ocean and Tropical Pacific deep sea cores generally similar until beginning Pliocene (5.2 Ma) when faunal record indicates divergence, suggesting Indonesian Seaway became biogeographic barrier to planktic foraminifera. However, still exchange of surface waters through this seaway. Earlier studies suggested M- Late Miocene occurrence for this biogeographic barrier).

Srinivasan, M.S. & D.K. Sinha (2003)- Planktic foraminiferal biogeography and ocean circulation in Southwest Pacific during last 3.3 My. In: P. Kundal (ed.) Proc. XVIII Indian Colloquium on Micropalaeontology and Stratigraphy, Nagpur, Gondwana Geological Society, Special Volume 6, p. 23-31.
(In SW Pacific marked differences in biogeographic distribution of the Menardella and Globoconella groups before and after 1.77 Ma, reflecting changes in surface water circulation. Spatial distribution of Neogloboquadrina pachydermia changed little in last 3.3 My, but frequency increased around 2.58 Ma and again at 0.78 Ma. Distribution pattern of Globigerina bulbides shows intense upweiling at 2.58 Ma)

Steinke, S., M. Prange, C. Feist, J. Groeneveld & M. Mohtadi (2014)- Upwelling variability off southern Indonesia over the past two millennia. Geophysical Research Letters 41, p. 7684-7693.
(online at: http://onlinelibrary.wiley.com/doi/10.1002/2014GL061450/pdf)

(Along S coasts of Java, S Sumatra and Lesser Sunda Islands, SE winds from Australia generate intensive coastal upwelling in austral winter (June-September), bringing cooler nutrient-rich waters to surface resulting in enhanced biological productivity. Proxies for upwelling for last 2000 years in deep sea cores show strong upwelling during Little Ice Age and weak during Medieval Warm Period and Roman Warm Period)

Stumpf, R., S. Kraft, M. Frank, B. Haley, A. Holbourn & W. Kuhnt (2015)- Persistently strong Indonesian Throughflow during marine isotope stage 3: evidence from radiogenic isotopes. Quaternary Science Reviews 112, p. 197-206.
(online at: https://www.geomar.de/fileadmin/personal/fb1/p-oz/mfrank/Stumpf_et_al_2015.pdf)
(Investigation of intensity changes of Indonesian Throughflow and reconstruction of depositional environment at Scott Plateau, W Timor Sea, during Marine Isotope Stage 3 (~60- 30 ka), using radiogenic isotopes)

Sudjono, E.H, D.K. Mihardja & N. Sari Ningsih (2004)- Indikasi fluktuasi arus lintas Indonesia di sekitar Selat Makassar. J. Geologi Kelautan 2, 1, p. 29-35.
(online at: http://ejournal.mgi.esdm.go.id/index.php/jgk/article/view/106/96)
('Indication of fluctuations in Indonesian Throughflow in the Makassar Strait')

Sun, H., T. Li, C. Liu, F. Chang, R. Sun, Z. Xiong & B. An (2017)- Variations in the western Pacific warm pool across the mid-Pleistocene: evidence from oxygen isotopes and coccoliths in the West Philippine Sea. Palaeogeogr. Palaeoclim. Palaeoecology 483, p. 157-171.
(Planktonic foraminifera O-isotope and Florisphaera profunda abundance data from Core MD06-3050 in W Philippine Sea on margin of W Pacific Warm Pool)

Surachmat, A. (1999)- Salinity of the modern Mahakam Delta, East Kalimantan. Berita Sedimentologi 12, p. 14-16.
(In Mahakam Delta upper delta plain (10-30 km from head-pass) only fresh water. Only last 10km of lower delta plain has brackish water withn salinties from 0-10 kppm. Brackish water in tidal channels with salinity 0-25 kppm. In active distributaries fresh water floats above saline water for 4-6 km)

Susanto, R.D., G. Fang, I. Soesilo, Q. Zheng, F. Qiao, Z. Wei & B. Sulistyo (2010)- New surveys of a branch of the Indonesian Throughflow. EOS 91, 30, p. 261-263.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2010EO300002)
(Indonesian Throughflow branch through S China Sea- Karimata Strait important role in Throughflow, despite rel. shallow depths)

Susanto, R.D., A. Ffield, A.L. Gordon & T.R. Adi (2012)- Variability of Indonesian throughflow within Makassar Strait, 2004-2009. J. of Geophysical Research: Oceans, 117, C9, p.
(Makassar Straits annual mean transport is S-ward at ~13.3 Sv (12.5-14.0 Sv), substantially higher than measurements from 1997 when El Nino suppressed transport (9.2 Sv))

Susanto, R.D. & A.L. Gordon (2005)- Velocity and transport of the Makassar Strait throughflow. J. of Geophysical Research 110, C01005, p. 1-10.
(online at: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.725.7432&rep=rep1&type=pdf
(S-ward transport in Makassar Strait confined mainly to upper 750m, above blocking topographic sill of Makassar Strait. Transport maximum occurs within thermocline (100-300m))

Susanto, R.D., A.L. Gordon & J. Sprintall (2007)- Observations and proxies of the surface layer throughflow in Lombok Strait. J. of Geophysical Research 112, C03S92, p. 1-11.

Susanto, R.D., A.L. Gordon & Q. Zheng (2001)- Upwelling along the coasts of Java and Sumatra and its relation to ENSO. Geophysical Research Letters 28, 8, p. 1599-1602.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/pdf/10.1029/2000GL011844)
(Upwelling along Java-Sumatra Indian Ocean coasts response to regional monsoon winds. Upwelling center with low sea surface T migrates W-ward and toward equator during SE monsoon (June-October), driven by

alongshore winds and latitudinal changes in Coriolis parameter. Upwelling terminated due to reversal of winds at onset of NW monsoon. During El Nino episodes upwelling extends in time and space, when ITF carries colder water, shallowing thermocline depth (by 20-60m) and enhancing upwelling strength)

Susanto, R.D., Z. Wei, T.R. Adi, Q. Zheng, G. Fang, B. Fan, A. Supangat, T. Agustiadi, S. Li, M. Trenggono & A. Setiawan (2016)- Oceanography surrounding Krakatau Volcano in the Sunda Strait, Indonesia. Oceanography 29, 2, p. 264-272.
(online at: https://tos.org/oceanography/assets/docs/29-2_susanto.pdf)
(Sunda Strait current velocity strongly affected by seasonal monsoon winds. During boreal winter monsoon NW winds draw waters from Indian Ocean into Java Sea. During the summer monsoon higher T, lower-salinity, and lower-density waters from Java Sea exported to Indian Ocean through Sunda Strait)

Takahashi, K. & H. Okada (2000)- The paleoceanography for the last 30,000 years in the southeastern Indian Ocean by means of calcareous nannofossils. Marine Micropaleontology 40, p. 83-103.
(Latest Quaternary paleoceanography based on calcareous nannofossils from deep-sea cores along N-S transect between 12-25° S off W Australia. Java upwelling system operates above N site and increases counts of small placoliths)

Tan, S., L.J. Pratt, D. Yuan, X. Li, Z. Wang, Y. Li, C. Corvianawatie, D. Surinati, .A.S. Budiman & A. Bayhaq (2020)- Hydraulics and mixing of the Deep Overflow in the Lifamatola Passage of the Indonesian Seas. Oceanic Flow–Topography InteractionsAmerican Meteorological Society 60, p. 2797- 2814.
(online at: https://journals.ametsoc.org/view/journals/phoc/50/9/jpoD190326.xml)
(Hydrographic measurements along thalweg of the 2000m deep Lifamatola Passage between Maluku Sea and 5000m deep Seram Sea (part of eastern route of Indonesian Throughflow)

Talley, L.D. & J. Sprintall (2005)- Deep expression of the Indonesian Throughflow: Indonesian intermediate water in the South Equatorial Current. J. of Geophysical Research 110, C10009, p. 1-30.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2004JC002826)

Tillinger, D. (2010)- The Indonesian Throughflow of the last 50 years. Ph.D. Thesis Columbia University, Palisades, New York, p. 1-101.
(Indonesian Throughflow transports ~15 Sv (1 Sv = 1 million m3/sec) of relatively cool and low salinity water from tropical Pacific Ocean into Indian Ocean. 50-year time series of transport calculated))

Tillinger, D. (2011)- Physical oceanography of the present day Indonesian Throughflow. In: R. Hall, M.A. Cottam & M.E.J. Wilson (eds.) The SE Asian gateway: history and tectonics of Australia-Asia collision, Geological Society, London, Special Publ. 355, p. 267-281.
(online at: www.statisticstutors.com/articles/debrat-indonesian-throughflow.pdf)
(Indonesian Throughflow transfers ~15 Sv (1 Sv = Mm3/second) of relatively cool, fresh water from tropical Pacific Ocean to Indian Ocean. Flow freshens the Indian Ocean and transports heat between basins. Etc.)

Tillinger, D. & A. Gordon (2009)- Fifty years of the Indonesian Throughflow. J. of Climate 22, 23, p. 6342-6355.
(online at: http://journals.ametsoc.org/doi/pdf/10.1175/2009JCLI2981.1)

Tozuka, T., T. Qu & T. Yamagata (2007)- Dramatic impact of the South China Sea on the Indonesian Throughflow. Geophysical Research Letters 34, L12612, p. 1-5.
(online at: http://onlinelibrary.wiley.com/doi/10.1029/2007GL030420/epdf)
(S China Sea throughflow may play important role in climate variability of Indo-Pacific region)

Tsuchi, R. (1997)- Marine climatic responses to Neogene tectonics of the Pacific Ocean seaways. Tectonophysics 281, p. 113-124.

Valsala, V. & S. Maksyutov (2010)- A short surface pathway of the subsurface Indonesian Throughflow water from the Java Coast associated with upwelling, Ekman transport, and subduction. Int. J. Oceanography 2010, 540783, p. 1-15.
(online at: https://www.hindawi.com/journals/ijocean/2010/540783/)
(Circulation modeling suggests Pacific-origin Indonesian Throughflow water can upwell from position below 100m to surface along S Java coast during upwelling season)

Van Aken, H.M., J. Punjanan & S. Saimima (1988)- Physical aspects of the flushing of the East Indonesian basins. In: J.E. van Hinte et al. (eds.) Proc. Snellius II Symposium, Jakarta 1987, Netherlands J. of Sea Research 22, p. 315-339.

Van Andel, T.H., G.R. Heath, T.C. Moore & D.F.R. McGeary (1967)- Late Quaternary history, climate, and oceanography of the Timor Sea northwestern Australia. American Journal of Science 265, p. 737-758.
(In late Quaternary climate in Timor Sea region more arid than adjacent land is today. Area mainly above sea level during last glaciation and covered by savanna vegetation. Subsequent transgression rapid. Supports Fairbridge contention that during glacial periods W-wind belts with associated rainfall displaced 5-10° N - ward and equatorial pluvial zone was compressed)

Van Riel, P.M. (1933-1959)- The Snellius Expedition in the eastern part of the Netherlands East-Indies 1929-1930. 6 vols. in 18 parts. E.J. Brill, Leiden.
(Results of the first oceanographic- zoological-geological 'Snellius expedition', 1929-1930 in E Indonesia)

Van Riel, P.M. (1934)- The bottom configuration in relation to the flow of the bottom water. The Snellius Expedition in the Eastern Part of the Netherlands East Indies 1929-1930, Vol II, 2, E.J. Brill, Leiden, p. 1-63.

Van Riel, P.M., J.P.H. Perks & F. Pinke (1937)- Scientific results of the Snellius- Expedition in the Eastern Part of the Netherlands East-Indies 1929-1930, Volume I, Chapters I-IV. E.J. Brill, Leiden, p. 1-178.
(overview volume online at: https://www.delpher.nl/nl/boeken/view?identifier=MMKB24:073713000:00006)
(Introduction and summaries of first Snellius oceanographic expedition to Indonesia, with expedition ship Willebrord Snellius. Four chapters: (I) Programme of Research and Preparations, (II) The expeditionary ship and the Naval Personnel's share, (III) The voyage in the Netherlands East-Indies, (IV) Investigations on shore)

Van Riel, P.M. (1938)- The influence of the bottom configuration on the properties of the sea water in the abyssal layers. Comptes Rendus Congres International de Geographie, Amsterdam 1938, Brill, Leiden, 2, Oceanographie, p. 18-26.
(online at: https://resolver.kb.nl/resolve?urn=MMKB06:000004273:pdf)
(Review of deep water circulation in Indonesian Archipelago, with its closed deep basins and troughs (mainly based on Snellius Expedition results. Deepest basin is Weber Deep (7440m). Bottom water of Pacific Ocean origin reaches as far S as the Savu Sea, via Morotai Basin, Ternate Trough, Bacan Basin, Buru Basin, Banda Sea and Wetar Basin)

Van Sebille, E., J. Sprintall, F.U. Schwarzkopf, A. Sen Gupta, A. Santoso, M.H. England, A. Biastoch & C.W. Boning (2014)- Pacific-to-Indian Ocean connectivity: Tasman leakage, Indonesian Throughflow, and the role of ENSO. J. of Geophysical Research: Oceans, 119, 2, p. 1365-1382.
(Circulation model)

Van Weering, T.C.E., D. Kusnida, S. Tjokrosapoetro, S. Lubis & P. Kridoharto (1989)- Slumping, sliding and the occurrence of acoustic voids in recent and subrecent sediments of the Savu Forearc Basin, Indonesia. In: J.E. van Hinte et al. (eds.) Proc. Snellius II Symposium, Jakarta 1987, Netherlands J. of Sea Research 24, 4, p. 415-430.
(High resolution seismic and acoustic profiles from Snellius-II Expedition in Savu Basin show widespread recent acoustic voids (transparent 'bright spots') that probably formed from local expulsion of pore-waters, caused by sediment mass movements down uplifted ridge between Sumba and Savu/Roti)

Verschell, M.A., J.C. Kindle & J.J. O'Brien (1995)- Effects of Indo-Pacific throughflow on the upper tropical Pacific and Indian Ocean. J. of Geophysical Research: Atmospheres, 100, C9, p. 18409-18420.
(Throughflow oceanography models)

Visser, K., R. Thunell & M.A. Goni (2004)- Glacial-interglacial organic carbon record from the Makassar Strait, Indonesia: implications for regional changes in continental vegetation. Quaternary Science Reviews 23, p. 17-27.
(Climate in W Pacific Warm Pool and other equatorial regions was colder by 3-4°C during glacial periods. Makassar Strait sediment core suggests vegetation on Borneo and surrounding islands did not change from tropical rainforest during last two Late Pleistocene glacial periods, supporting hypothesis that winter monsoon strengthened in glacial periods, allowing Indonesia to maintain high rainfall despite cooler conditions)

Visser, K., R. Thunell & L. Stott (2003)- Magnitude and timing of temperature change in the Indo-Pacific warm pool during deglaciation. Nature 421, 6919, p. 152-155.
(Oxygen isotopes and Mg/Ca ratios of Globigerinoides ruber shells from Makassar strait in Indo-Pacific warm poolyielde estimates of sea surface temperatures and ice volume. Sea surface T increased by 3.5-4.0 °C during last two glacial-interglacial transitions, synchronous with global increase in atmospheric CO_2 and Antarctic warming, but T increase ~2000-3000 years before N Hemisphere ice sheets melted. Tropical Pacific region plays important role in driving glacial-interglacial cycles)

Vranes, K., A.L. Gordon & A. Field (2002)- The heat transport of the Indonesian Throughflow and implications for the Indian Ocean heat budget. Deep Sea Research II, 49, p. 1391-1410.

Vranes, K. & A.L. Gordon (2005)- Comparison of Indonesian throughflow transport observations, Makassar Strait to Eastern Indian Ocean. Geophysical Research Letters 32, 10, L10606, p. 1-5.
(online at: https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2004GL022158)

Wajsowicz, R.C., A.L. Gordon, A. Ffield & R.D. Susanto (2003)- Estimating transport in Makassar Strait. Deep Sea Research II, 50, 12-13, p. 2163-2181.
(Current meters in Labani channel in 1996-1998 show mean N-ward flow at depths below ~800m and S-ward above that)

Wang, P. (1999)- Response of Western Pacific marginal seas to glacial cycles: paleoceanographic and sedimentological features. Marine Geology 127, p. 5-39.
(On Late Quaternary in five NE Pacific marginal seas, from Bering Sea to Banda Sea. During glacial cycles reorganization of sea water circulation in basins. Decrease of sea area and sea surface temperature in marginal seas lead enhanced aridity of inland China during glaciation)

Wang, P., L. Wang, Y. Bian & Z. Jian (1995)- Late Quaternary paleoceanography of the South China Sea: surface circulation and carbonate cycles. Marine Geology 127, p. 145-165.

Waworuntu, J.M. (1999)- Water mass transformations and throughflow variability in the Indonesian seas. Ph.D. Thesis University of Miami, Coral Gables, p. 1-98.

Waworuntu, J.M., R.A. Fine, D.B. Olson & A.L. Gordon (2000)- Recipe for Banda Sea water. J. Marine Research 58, p. 547-569.
(Water from W Pacific flows through Indonesian Seas following different pathways and is modified by various processes to form uniquely isohaline (34.6) Banda Sea Water)

Waworuntu, J.M., S.L. Garzoli & D.B. Olson (2001)- Dynamics of Makassar Strait. J. Marine Research 59, p. 313-325.
(online at: www.aoml.noaa.gov/phod/docs/garzoli_jmr_2001.pdf)

(Throughflow in Makassar Strait requires at least 3-layer description: upper 200 m water mass characterized by the salinity maximum of North Pacific SubtropicalWater; water in layer 2 is North Pacific Intermediate Water salinity minimum (~300m); bottom layer ~1600m)

Weber, M. (1902)- Siboga expeditie- Introduction et description de l'expedition. Uitkomsten op zoologisch, botanisch, oceanographisch en geologisch gebied, verzameld in Nederlandsch Oost-Indie 1899-1900, Monograph 1, Brill, Leiden, p. 1-152.
('Introduction and description of the Siboga expedition 1899-1900'. First of many volumes on results of the zoological, botanical, oceanographic and geological studies in E Indonesia waters and islands by members of the Siboga Expedition. Geological results reported by Wichmann (1925))

Wei, J., M.T. Li, P. Malanotte-Rizzoli, A.L. Gordon & D.X. Wang (2016)- Opposite variability of Indonesian Throughflow and South China Sea Throughflow in the Sulawesi Sea. J. Physical Oceanography 46, p. 3165-3180.
(online at: https://journals.ametsoc.org/doi/pdf/10.1175/JPO-D-16-0132.1)

Wetzel, A. (1983)- Biogenic structures in modern slope to deep-sea sediments in the Sulu Sea Basin (Philippines). Palaeogeogr. Palaeoclim. Palaeoecology 42, p. 285-304.
(On biogenic structures and depth zonation in 23 cores taken by RV Valdivia from 1000- 5000m water depth, Sulu Sea. Slope- rise sediments down to 3800m almost totally bioturbated, with 8 types of traces: common Helminthopsis, Planolites, Thalassinoides, less common Chondrites, Scolicia, Skolithos, Trichichnus and Zoophycos. Abyssal plain deposits below 4400m less bioturbated (20% or less of sediment burrowed). Increase of trace diversity by small traces, dominated by Muensteria, 'mycellia' and Phycosiphon. Traces typical of many turbidite sequences ('graphoglyptids') absent)

Wetzel, A. (2002)- Modern *Nereites* in the South China Sea- ecological association with redox conditions in the sediment. Palaios 17, p. 507-515.
(Nereites trace fossil ichnofabrics in box cores from >4000m water depths in central S China Sea. Appear to be restricted to oxygenated sediments above redox boundary)

Wijffels, S.E., G. Meyers & J.S. Godfrey (2008)- A 20-yr average of the Indonesian Throughflow: regional currents and the interbasin exchange. J. Physical Oceanography 38, p. 1965-1978.
(online at: https://journals.ametsoc.org/doi/pdf/10.1175/2008JPO3987.1)

Wyrtki, K. (1957)- Die Zirkulation an der Oberflache der Südostasiatischen Gewasser. Deutsche Hydrographische Zeitschrift 10, 1, p. 1-13.
('The circulation at the surface of SE Asian waters'. The currents at the surface of SE Asian waters correlated with monsoons. With six charts for every second month)

Wyrtki, K. (1958)- The water exchange between the Pacific and the Indian Oceans in relation to upwelling processes. Proc. 9th Pacific Science Congress 16, Oceanography, p. 61-65.

Wyrtki, K. (1961)- Physical oceanography of the Southeast Asian waters. Scientific Reports of marine investigations of the South China Sea and the Gulf of Thailand, NAGA Report 2, Scripps Inst. Oceanography, University of California Press, San Diego, p. 1-195.
(Classic NAGA 2 review of oceanography of Indonesian waters. With maps of seasonal surface currents, salinity, oxygen, temperature, tidal types and amplitudes, etc.)

Wyrtki, K. (1962)- The upwelling in the region between Java and Australia during the south-east monsoon. Australian J. Marine Freshwater Res. 13, 3, p. 217-225.
(online at: www.publish.csiro.au.ezproxy.lib.monash.edu.au/?act=view_file&file_id=MF9620217.pdf)
(During SE monsoon season main upwelling area is along coast of Java and Sumbawa, not along NW Australian shelf. Region characterized by high inorganic phosphate at bottom of the euphotic layer and high plankton biomass. Transparency of water in upwelling area is low, indicating high suspended matter)

Wyrtki, K. (1987)- Indonesian throughflow and the associated pressure gradient. J. of Geophysical Research 92, p. 12941-12946.
(online at: ftp://mananui.soest.hawaii.edu/pub/rlukas/Klaus/papers/Wyrtki%201987%20JGR.pdf)
(Flow of water from W Pacific to E Indian Ocean through Indonesian archipelago governed by strong pressure gradient. Average sea level difference 16 cm and most of pressure gradient contained in upper 200m. Annual maximum during SE monsoon in July- August and minimum in January-February)

Xu, Y., L. Wang, X. Yin, X. Ye, D. Li, S. Liu, X. Shi, R.A. Troa, R. Zuraida, E.Triarso & M. Hendrizan (2017)- The influence of the Sunda Strait opening on paleoenvironmental changes in the eastern Indian Ocean. J. Asian Earth Sciences 146, p. 402-411.
(With E Holocene sea level rise warm and low-salinity sea water from Java Sea was transported into E Indian Ocean after opening of Sunda Strait. Core CJ01-185 (1538m water depth) in E Indian Ocean off Sunda Strait sediments derived mainy from Java Island. Sedimentation rate increased from last glacial period to Holocene. Additional terrigenous nutrients from Java Sea induced paleoproductivity with higher TOC and TN concentrations after opening of Sunda Strait)

Yin, S., F.J. Hernandez-Molina, L. Lin, J. Chen, W. Ding & J. Li (2022)- Isolation of the South China Sea from the North Pacifc Subtropical Gyre since the latest Miocene due to formation of the Luzon Strait. Nature Scientific Reports 11, 1562, p. 1-10.
(online at: https://www.nature.com/articles/s41598-020-79941-4.pdf)
(Study of contourites show vigorous N Pacifc subtropical gyre circulation through S China Sea until Late Miocene, then major shift in NPSG in latest Miocene (~6.5 Ma) due to restriction of S China Sea from N Pacifc due to formation of Luzon Strait as consequence of NW movement of Philippine Sea plate)

Yuliyanti, A., H. Permana, I. Setiawan, H. Nurohman & S.P. Saputro (2022)- Geochemistry of seafloor surface sediment and submarine hydrothermal signature of Tomini Bay, Indonesia. Australian J. Earth Sciences, p. 1-12.
(Seafloor sediment samples from Tomini Bay enriched in Na, P, S, Ca, Ni, Sr, and Ba, mainly from terrigenous source. Elevated concentrations of Mg, S, Cr, Co and Ni at one site suggest contribution from mafic terrigenous source. Manganese-rich sediment layer provides evidence for submarine hydrothermal activity)

Xu, J. (2014)- Change of Indonesian Throughflow outflow in response to East Asian Monsoon and ENSO activities since the Last Glacial. Science China: Earth Sciences 57, p. 791-801.

Zhang, P., R. Zuraida, J. Xu & C. Yang (2016)- Stable carbon and oxygen isotopes of four planktonic foraminiferal species from core-top sediments of the Indonesian Throughflow region and their significance. Acta Oceanologica Sinica 35, 10, p. 63-76.
(Horizontal and vertical distributions of δ18O and δ13C investigated in Globigerinoides ruber, Gs sacculifer, Pulleniatina obliquiloculata and Neogloboquadrina dutertrei, from 62 core-top samples from Indonesian Throughflow region. In Makassar Strait depleted δ18O and δ13C linked to freshwater input. In Bali Sea depleted δ18O result of freshwater input, while depleted δ13C more likely due to Java-Sumatra upwelling. G. ruber and G. sacculifer calcify within mixed-layer, respectively at 0-50 m and 20-75 m water depth, and P. obliquiloculata and N. dutertrei within upper thermocline at 75-125 m water depth)

Zuvela-Aloise, M. (2005)- Modelling of the Indonesian Throughflow on glacial-interglacial time-scales. Doct. Thesis Christian-Albrechts Universitat Kiel, p. 1-185.
(online at: http://d-nb.info/980884292/34)
(Model used to simulate circulation through the Indonesian Gateways. Lowering of glacial sea level of 120m not sufficient to severely block flow within Makassar Strait as main passage of Throughflow. Reduction in sill depth and absence of low buoyancy surface waters due to exposure of shelf area led to intensification of surface flow within Makassar Strait)

I.5. INDONESIA- SE ASIA CARBONATES, CORAL REEFS

(Numerous other papers on Recent environments and sediments and Oceanography that could be listed here but are tied to more specific sub-areas in Indonesia, may be listed under those areas)

1.5. SE Asia- Modern carbonate environments, Coral Reefs, Cenozoic carbonates

Papers in this chapter on coral reefs and Cenozoic carbonates are of a more general nature. Numerous additional papers on specific localities may found under the areas. It includes references to reefs and Cenozoic carbonates from 'Circum-Indonesia' (North Australia, PNG, SW Pacific, Philippines, South China Sea, etc.), which all share characteristics with examples from Indonesia.

Akbar, M., B. Vissapragada, A.H. Alghamdi, D. Allen, M. Herron et al. (2001)- A snapshot of carbonate reservoir evaluation. Oilfield Review, Schlumberger, Winter 2000/2001, p. 20-41.
(online at: www.slb.com/~/media/Files/resources/oilfield_review/ors00/win00/p20_41.ashx)
(Reservoir evaluation paper with example of M Miocene buildup in Sibolga basin, off NW Sumatra, with unsuccessful 1997 well due to lack of internal seals and late top seal preventing capture of early biogenic gas)

Alcock, A. (1902)- Report on the deep-sea Madreporaria of the Siboga Expedition. Siboga Expeditie Monograph 16a, Brill, Leiden, p. 1-51.
(online at: www.archive.org/details/sibogaexpeditie07sibo)
(Descriptions of 75 species of modern, mainly solitary deep-sea corals from East Indonesia, collected during Siboga Expedition 1899-1900, incl. Caryophyllia, Dendrophyllia, Coenopsammia, etc)

Amir, S., H. Tsegab, G.J. Soto & A.I. Azman (2022)- Facies mapping of the Holocene carbonate complexes in Kepulauan Seribu Java Basin, Indonesia using satellite-derived data set. Pertanika J. Science Technology 30, 3, p. 2253-2270.
(online at: http://www.pertanika.upm.edu.my/resources/files/Pertanika%20PAPERS/JST%20Vol.%203 Etc.)
(Satellite image mapping of modern carbonate sub-environments in Thousand Islands patch reefs complex, Jakarta Bay/Java Sea: reef sand apron, subtidal reef margin, and shallower subtidal lagoon. Bidirectional monsoon winds caused E-W orientations of individual reefs. Islands in S part of complex include larger platforms, with lagoons less <3 m deep and larger reef sand aprons; N part of archipelago reefs smaller with no lagoon formation. Etc. (see also earlier 'classic' works on this modern reef complex by Scrutton (1976), Jordan (1998) and Park (1992, 2003), also Utami (2021), Jambak et al. (2022), etc.)

Ashton, P.R. (1981)- Estimating potential reserves in Southeast Asian Neogene reefs. Proceedings Seminar Assessment of undiscovered oil and gas, Kuala Lumpur 1980, UN ESCAP CCOP, Technical Publication 10, p. 244-259.

Azmy, K., E. Edinger, J. Lundberg & W. Diegor (2010)- Sea level and paleotemperature records from a mid-Holocene reef on the North coast of Java, Indonesia. Int. J. Earth Sciences (Geologische Rundschau) 99, p. 231-244.
(Mid-Holocene fossil fringing reefs at Point Teluk Awur, near Jepara, N coast of C Java, contains two horizons of Porites lobata microatolls. Age of corals in lower horizon, 80 cm above sea level, ~7000 yr BP, upper horizon at 1.5m, ~6960 ± 60 yr BP, matching transgressive phase of regional sea-level curves)

Bak, R.P.M. & G.D.E. Hovel (1989)- Ecological variables, including physiognomic structural attributes, and classification of Indonesian coral reefs. In: J.E. van Hinte et al. (eds.) Proc. Snellius II Symposium, Jakarta 1987, Netherlands J. of Sea Research 23, 2, p. 95-106.
(Measured transects across 30+ seaward facing modern coral reef slopes in E Indonesia (results not clear?))

Bal, A.A., R. Bray & R. Sigit (2012)- Hydrothermally enhanced fractured reservoirs- a new play? Petroleum Geoscience Conference Exhib. PCGE 2012, Kuala Lumpur 2012, p. 1-3. *(Extended Abstract)*

(online at: http://geology.um.edu.my/gsmpublic/PGCE2012/)
(With exception of Nang Nuan (Gulf of Thailand karst buried hill) and some references to fractured granites in Vietnam, hydrothermally altered hydrocarbon reservoirs largely unreported in SE Asia. Hydrothermal fluids may create higher porosities than expected, not necessarily associated with unconformities)

Bassi, D., J.H. Nebelsick, A. Checconi, J. Hohenegger & Y. Iryu (2009)- Present-day and fossil rhodolith pavements compared: their potential for analysing shallow-water carbonate deposits. Sedimentary Geology 214, p. 74-84.
(Review of rhodoliths (algal nodules consisting predominantly of coralline algae) and sediments formed by these unattached coralline algae, called rhodolith pavements. Includes study of Recent 'rhodolith pavement' off Sesoko-jima (S Japan), at depths of 50-70 m on submarine terrace)

Bellwood, D.R., T.P. Hughes, S.R. Connolly & J. Tanner (2005)- Environmental and geometric constraints on Indo-Pacific coral reef biodiversity. Ecology Letters 8, 6, p. 643-651.
(Discussion of coral species richness patterns in Indo-Australian archipelago coral reef biodiversity 'hotspot')

Bernecker, M. (2005)- Late Triassic reefs from the Northwest and South Tethys: distribution, setting, and biotic composition. Facies 51, p. 442-453.
(Ladinian and Carnian increasing expansion of reefs. Optimum reef diversity and frequency in Norian, as sponge and coral reefs associated with development of carbonate platforms. Not much on SE Asia)

Betzler, C. (1997)- Ecological control on geometries of carbonate platforms: Miocene/Pliocene shallow-water microfaunas and carbonate biofacies from the Queensland Plateau (NE Australia). Facies 37, p. 147-166.
(Miocene and Pliocene of ODP Leg 133 sites record biofacies evolution prior and during the partial drowning of Queensland Plateau carbonate platform. M Miocene depositional geometry is carbonate bank with a well-defined rim and flank. Late Miocene- E Pliocene carbonate ramps, rich in large benthic forams. Reconstruction of Tortonian- Messinian relative sea level curve shows rise punctuated by four falls. Lepidocyclina (N.) rutteni described from Australian faunal province for first time)

Betzler, C., T.C. Brachert & D. Kroon (1995)- Role of climate for partial drowning of the Queensland Plateau carbonate platform (northeastern Australia). Marine Geology 123, p. 11-32.
(Late Miocene- E Pliocene partial drowning of Queensland Plateau carbonate platform off NE Australia. Modern plateau mosaic of pinnacle reefs and larger reefs representing relicts of E-M Miocene buildups. Late Miocene rich in larger forams Lepidocyclina and Cycloclypeus show Pliocene partial drowning of platform preceded by 4 Myr of neritic carbonate deposition without any reefs. Low surface water temperatures (17°-19°C) major factor which suppressed reef growth during Late Miocene- E Pliocene)

Betzler, C. & G.C.H. Chaproniere (1993)- Paleogene and Neogene larger foraminifers from the Queensland Plateau: biostratigraphy and environmental significance. In: J.A. McKenzie, P.J. Davies et al. (eds.) Proc. Ocean Drilling Program (ODP), Scientific Results 133, p. 51-66.
(Leg 133 Queensland Plateau ODP site sites with Eocene (Nummulites, Discocyclina) and Late Oligocene- M Miocene larger foram facies)

Boekschoten, G.J., M. Borel Best, A. Oosterbaan & F.M. Molenkamp (1989)- Past corals and Recent reefs in Indonesia. Proc. Snellius II Symposium, Jakarta 1987, Netherlands J. of Sea Research 23, 2, p. 117-122.
(Snellius-II Expedition collections of Lower Pliocene corals near Salayer and Quaternary reefs on Ambon and Sumba and compared with Pliocene of Nias. Absence of Acropora and Montipora from Quaternary coral faunae (common in Pliocene and modern reefs) may reflect disturbance by Pleistocene sea level fluctuations)

Boekschoten, G.J., M.B. Best & K.S. Putra (2000)- Balinese reefs in historical context. In: K.S.Moosa et al. (eds.) Proc. 9th International Coral Reef Symposium, Bali 2000, 1, p. 321-324.
(online at: www.reefbase.org/resource_center/publication/pub_14767.aspx)

(Oldest reefs of Bali developed on top of Neogene pillow lava flows, but barely preserved. Parts of early and late Pleistocene reefs on Bukit Peninsula in S Bali. Holocene post-glacial reefs developed along limestone cliffs and denuded volcanic hardnecks; on lava outflows; and on residual boulder coasts)

Boichard, R., P.F. Burollet, B. Lambert & J.M. Villain (1985)- La plate-forme carbonate du Pater Noster, Est de Kalimantan (Indonesie), etude sedimentologique et ecologique. TOTAL Compagnie Francaise du Petrole, Notes et Memoires 20, p. 3-101.
('The carbonate platform of Paternoster, East of Kalimantan'. Well-documented sedimentological- ecological study by TOTAL personnel of Recent sediments on marine platform bordering SW Makassar Straits deepwater and its coral reef islands. All bottom samples are m-c grained carbonate sands. On reef islands mainly fragments of corals, algae and foraminifera, between reef complexes mainly benthic foraminifera. In some sheltered lows abundant Halimeda algae. On E slope of platform common planktonic foraminifera, coccoliths and glauconite)

Borel Best, M. & G.S. Boekschoten (1989)- Comparative qualitative studies on coral species composition in various reef sites in the eastern Indonesian Archipelago. In: J.H. Choat et al. (eds.) Proc. 6th International Coral Reef Symposium, Townsville, 3, p. 197-204.
(350 species of living corals in E Indonesia)

Borel Best, M., B.W. Hoeksema, W. Moka, H. Moll, Suharsono & I. Nyoman Sutra & (1989)- Recent scleractinian coral species collected during the Snellius-II Expedition in Eastern Indonesia. In: J.E. van Hinte et al. (eds.) Proc. Snellius II Symposium, Jakarta 1987, Netherlands J. of Sea Research 23, 2, p. 107-115.
(East Indonesia has the richest coral reef faunas in the world (other rich areas are Philippines and Great Barrier Reef of NE Australia). During 1984 Snellius-II Expedition ~350 species/75 genera of scleractinian corals were collected from 9 coral reef areas between Sulawesi-Sumba-Seram. Most reefs differ greatly from one another)

Bosence, D. (2005)- A genetic classification of carbonate platforms based on their basinal and tectonic setting in the Cenozoic. Sedimentary Geology 175, p. 49-72.
(Eight types of carbonate platform recognized, based on basinal and tectonic setting: Fault-Block, Salt Diapir, Subsiding Margin, Offshore Bank, Volcanic Pedestal, Thrust-Top, Delta-Top and Foreland Margin platforms)

Bourrouilh-Le Jan, F.G. (1979)- Les plate-formes carbonatees de haute energie a rhodolithes et la crise climatique du passage Mio-Pliocene dans le domaine Pacifique. Bull. Centres Recherches Exploration-Production Elf-Aquitaine 3, 2, p. 489-495.
('The high energy carbonate platforms with rhodoliths and the climatic crisis of the Mio-Pliocene transition in the Pacific area'. Large Middle and Late Miocene carbonate platforms built on volcanic remains in W and SW Pacific. In rhodolith facies, without corals, probably related to colder climate interval (?). Warming around Mio-Pliocene boundary allowed resettlement of corals)

Bourrouilh-Le Jan, F.G. & L.C. Hottinger (1988)- Occurrence of rhodolites in the tropical Pacific- a consequence of Mid-Miocene paleo-oceanographic change. Sedimentary Geology 60, p. 355-358.
(Rhodolites over wide areas of tropical Pacific dated as M Miocene. They are preceded in E Miocene and succeeded in Late Miocene by hermatypic coral deposits. Possible causes of facies change: sea-level rise drowning reefs, drop of winter surface water temperature and increase in fertility of surface waters inhibiting compensatory growth of hermatypic corals until sea-level fall restored original conditions of deposition)

Braga, J.C. (2011)- Fossil coralline algae. In: D. Hopley (ed.) Encyclopedia of modern coral reefs; structure form and process, Springer Verlag, Dordrecht, p. 423-426.
(Depth zonation of coralline algae in Quaternary Pacific reefs three zones: (1) Shallow coral reef (0-5/20m): coralline algae encrusting corals (Hydrolithon, Neogoniolithon); (2) Intermediate fore-reef slope (15/20-50/60m): coralline algae as rhodoliths (Mesophyllum, Lithophyllum); (3) Deep fore-reef slope (50/60- 120m): coralline algae as nodules in carbonate sands or crusts on hard substrates, frequently intergrown with encrusting foraminifera (Lithothamnium, Mesophyllum, Sporolithon, Peyssonnellia))

Braithwaite, C.J.R. & L.F. Montaggione (2009)- The Great Barrier Reef: a 700 000 year diagenetic history. Sedimentology 56, p. 1591-1622.
(Variety of carbonate cements identified in deep borehoe through Ribbon Reef 5, off NE Australia)

Bromfield K. (2010)- Evolutionary dynamics of Indo-Pacific reef corals throughout the Neogene. Ph.D. Thesis, University of Queensland, p. 1-269. *(Unpublished)*
(Study of 155 species of M Miocene- E Pleistocene reef coral communities from Indonesia (Salayar, S Sulawesi), PNG (New Britain) and Fiji. Coral communities vary with global sea level and time. 41.8% of species in M Miocene in New Britain now extinct. Study supports previously proposed models of E Pliocene turnover event in Scleractinia in Indo-Pacific)

Bromfield, K. & J.M. Pandolfi (2011)- Regional patterns of evolutionary turnover in Neogene coral reefs from the central Indo-West Pacific Ocean. Evolut. Ecology, May 2011, p. 1-17.
(Neogene origination and extinction patterns from Indonesia (Salayar Island; 5.8-1.4 Ma), New Britain and Fiji. Two faunal turnover events: (1) increase in Scleractinia diversity during M Miocene (17-14 Ma), coinciding with large-scale sea level fluctuations and M Miocene collision event, possibly facilitated by habitat fragmentation associated with tectonism and sea level fall (2) lowering of diversity throughout Late Miocene-Pliocene (7-3 Ma), followed by pulse of extinction at Pliocene-Pleistocene boundary (~2.6 Ma))

Brouwer, H.A. & G.A.F. Molengraaff (1919)- On reef caps. Proc. Koninklijke Nederlandse Akademie van Wetenschappen, Amsterdam, 21, 2, p. 816-826.
(Many islands in E Indonesia covered with Plio-Pleistocene fringing reefs, on some islands elevated recently up to 1300m above s.l. Highest reef caps are not necessarily oldest if uplift not uniform)

Brouwer, H.A. (1926)- The origin of coral reefs and reef caps with special reference to mountain building within the Netherlands East Indies. Proc. 2nd Pan-Pacific Science Congress, Australia, 1923, p. 1164-1167.

Brown, B.E. (2007)- Coral reefs of the Andaman Sea- An integrated perspective. In: R.N. Gibson et al. (eds.) Oceanography and Marine Biology: an annual review 45, CRC Press, p. 173-194.
(online at: https://www.researchgate.net/publication/279403911_Coral_reefs_of_the_Andaman_Sea_-_An_integrated_perspective)
(Review of the common and often diverse coral reefs in the Andaman Sea region. Fringing reefs abundant in Andaman and Nicobar Islands, Mergui Archipelago (Myanmar), west coasts of Thailand and Malaysia, and NW Sumatra. Most have never been visited by scientists)

Brownlee, D.N. & M.W. Longman (1981)- Depositional history of a Lower Miocene pinnacle reef, Nido B oilfield, the Philippines. Proc. 4th International Coral Reef Symposium, Manila, 1, p. 619-625.
(Lower Miocene pinnacle reef complexes at Nido fields in S China Sea, NW of Palawan. Relief ~150-200 m)

Bubb, N.N. & W.G. Hatlelid (1976)- Recognition of carbonate build-ups on seismic sections. Proc. Indonesian Petroleum Association (IPA) Carbonate Seminar, Jakarta 1976, p. 103-109.

Buxton, M.W.N. & H.M. Pedley (1989)- A standardized model for Tethyan Tertiary carbonate ramps. J. Geological Society, London, 146, p. 746-748.

Cabioch, G., L. Montaggioni, N. Thouveny, N. Frank, T. Sato, V. Chazottes, H. Dalamasso, C. Payri, M. Pichon & A.M. Semah (2008)- The chronology and structure of the western New Caledonian barrier reef tracts. Palaeogeogr. Palaeoclim. Palaeoecology 268, p. 91-105.
(Development of New Caledonia barrier reef result of interplay between margin subsidence and sea-level changes. Major W shelf-margin building appears to have started during MIS 11 (400 ka) from shallow-water carbonate platform deposits older than 780 ka. Climatic conditions likely not optimal before late Quaternary, resulting in luxuriant reef expansion only in last 400,000 yrs)

Camoin, G.F., M. Colonna, L.F. Montaggioni, J. Casanova, G. Faure & B.A. Thomassin (1997)- Holocene sea-level changes and reef development in the southwestern Indian Ocean. Coral Reefs 16, p. 247-259.

Camoin, G.F. & P.J. Davies (eds.) (1998)- Reefs and carbonate platforms in the Pacific and Indian Oceans. Int. Association of Sedimentologists (IAS), Special Publ. 25, Blackwell Science, p. 1-336.

Carnell, A. & M.E.J. Wilson (2003)- A review of dolomites in Southeast Asia. Proc. 29th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, IPA03-G-153, p. 1-11.
(Short version of more extensive paper on the subject by Carnell & Wilson (2004))

Carnell, A.J.H. & M.E.J. Wilson (2004)- Dolomites in SE Asia- varied origins and implications for hydrocarbon exploration. In: C.J.R Braithwaite et al. (eds.) The geometry and petrogenesis of dolomite hydrocarbon reservoirs, Geological Society, London, Special Publ. 235, p. 255-300.
(online at: http://searg.rhul.ac.uk/pubs/carnell_2004%20Dolomites%20in%20SE%20Asia.pdf)
(Diagenetic dolomite present in Paleozoic, Triassic, Paleogene and Neogene carbonates in SE Asia. Pre-Tertiary carbonates form part of economic basement; most not considered to form economic prospects. Manusela Lst of Seram viewed as E-M Jurassic (should be Late Triassic?; JTvG), Dolomitic Tampur Lst of N Sumatra viewed as Eocene (but could be Permian?; JTvG))

Carozzi, A.V., M.V. Reyes & V.P. Ocampo (1976)- Microfacies and microfossils of the Miocene reefs carbonates of the Philippines. Philippine Oil Development Company, Manila, Special Publ. 1, p. 1-80.
(40 photomicrographs of carbonate microfacies, illustrating model of Miocene reef sedimentation)

Chalabi, A. (2012)- Remote sensing analysis of Recent carbonate platforms, East of Sabah: potential analogues for Miocene carbonate platforms of the South China Sea. Jurnal Geologi Indonesia 7, 3, p. 123-135.
(online at: http://jgi.bgl.esdm.go.id/index.php/JGI/article/view/29/21)

Chalabi, A., G. Jimenez Soto & B.J. Pierson (2023)- Spatial distribution of sedimentary facies on modern carbonate platforms interpreted via remote sensing, Northwest Celebes Sea, Malaysia. In: E.C. Rankey & M.C. Poppelreiter (eds.) Cenozoic isolated carbonate platforms- Focus Southeast Asia, Society for Sedimentary Geology (SEPM) Special Publ. 114, p. 1-17.
(Satellite imagery analysis of 7 modern carbonate platforms E of Sabah, combined with 140 sediment samples. Mudstone to wackestone mainly in deep lagoon; wackestone to packstone dominant in shallow lagoon. Carbonate sand shoal packstone- grainstone. Reef complex boundstone- rudstone)

Chapman, F. & D. Mawson (1906)- On the importance of *Halimeda* as reef forming organisms with a description of the *Halimeda* limestone of the New Hebrides. Quarterly J. Geological Society, London, 62, p. 702-711.
(Halimeda important component of many reefal limestones (but probably more susceptible to diagenetic decay than Lithothamnion, corals or foraminifera))

Collins, L.B. (2002)- Tertiary foundations and Quaternary evolution of coral reef systems of Australia's North West Shelf. In: M. Keep & S. Moss (eds.) The sedimentary basins of Western Australia 3, Proc. West Australian Basin Symposium, Petroleum Exploration Society Australia (PESA), Perth, p. 129-152.
(NW Shelf is modern tropical ramp, underlain by Cretaceous-Tertiary carbonates. Late Tertiary-Quaternary, fringing to isolated coral reefs rise from deep-ramp settings. Scott Reef is isolated reef formed mainly during Last Interglacial (~125 ka). Other reefs that apparently grew to sea level are now 30m below present sea level, indicating significant subsidence in Late Quaternary. Contemporary reefs grew during Holocene in accommodation space provided by subsidence and are up to 35m thick. Rowley Shoals emergent annular reefs rise from depths of 200-400 m. Possible spatial association between reef systems and hydrocarbon seeps)

Collins, L.B. (2010)- Controls on morphology and growth history of coral reefs of Australia's western margin. In: W.A. Morgan, A.D. George et al. (eds.) Cenozoic carbonate systems of Australasia, Soc. Sedimentary Geology (SEPM), Special Publ. 95, p. 195-218.

(Description of reefs along W margin of Australia. Latitudinal and climatic gradient from macrotidal tropical in N to microtidal-temperate in S)

Collins, L.B., V. Testa, J. Zhao & D. Qu (2010)- Holocene growth history and evolution of the Scott Reef carbonate platform and coral reef. J. Royal Society Western Australia 94, p. 239-250.
(online at: www.rswa.org.au/publications/Journal/94(2)/Collinsetal.pp. 239-250.pdf)
(Scott Reef is small carbonate platform located in distal ramp setting on Australia NW Shelf. Rising from depths of 400-700 m. Composed of two large isolated coral reefs. Present-day reef morphology developed mainly in Holocene. Developed over Late Triassic anticline; area probably above sea level from Permian- Late Jurassic)

Conesa, G.A.R., E. Favre, P. Munch, H. Dalmasso & C. Chaix (2006)- Biosedimentary and paleoenvironmental evolution of the Southern Marion Platform from the Middle to Late Miocene (Northeast Australia, ODP Leg 194, Sites 1196 and 1199). In: F.S. Anselmetti, A.R. Isern et al. (eds.) Proc. Ocean Drilling Project (ODP), Scientific Results 194, 5, p. 1-38.
(online at: www-odp.tamu.edu/publications/194_SR/VOLUME/CHAPTERS/005.PDF)
(Facies study of 663m thick Miocene carbonate succession penetrated by two ODP wells on S Marion Plateau)

Crabbe, M.J.C., M.E.J. Wilson & D.J. Smith (2006)- Quaternary corals from reefs in the Wakatobi Marine National Park, SE Sulawesi, Indonesia, show similar growth rates to modern corals from the same area. J. Quaternary Science 21, 8, p. 803-809.
(Study of growth rates of Porites coral from growth bands at Kaledupa island, Tukang Besi, SE Sulawesi. Growth rates of Quaternary species from up to 400m thick uplifted reef terrace slightly lower, but comparable to modern coral (~10-15 mm/yr))

Crevello, P., R. Park, K. Tabri & Premonowati (2006)- Equatorial carbonate depositional systems and reservoir development: modern to Miocene- Oligocene analogs of SE Asia: high resolution exploration and development applications from outcrop to subsurface. AAPG Equatorial Carbonate Field Seminar, p. 1-53.

Croize, D., S.N. Ehrenberg, K. Bjorlykke, F. Renard & J. Jahren (2010)- Petrophysical properties of bioclastic platform carbonates: implications for porosity controls during burial. Marine and Petroleum Geology 27, p. 1765-1774.
(Study of petrophysical properties of Miocene platform carbonates of Marion Plateau, off NE Australia)

Darman, H. (1999)- The effect of eustatic sea level change in the development of carbonate reservoir: an overview. Berita Sedimentologi 10, p. 9-15.
(online at: https://journal.iagi.or.id/index.php/FOSI/article/view/276/246)
(Discussion of concepts of carbonate sequence stratigraphy)

Darwin, C. (1842)- The structure and distribution of coral reefs; being the first part of the geology of the voyage of the Beagle under the command of Capt. Fitzroy, R.N. during the years 1832 to 1836. Smith, Elder and Co., London, p. 1-214.
(online at: https://darwin-online.org.uk/content/frameset?viewtype=text&itemID=F271&pageseq=1)
(Also revised second and third editions in 1874, 1889) (Classic pioneering study by British naturalist Charles Darwin on global distribution of coral reefs, including some of the first descriptions of the extent of reef building in eastern Indian Ocean, Indonesian archipelago, etc.)

Davies, P.J. & D.W. Kinsey (1977)- Holocene reef growth- One Tree island, Great Barrier reef. Marine Geology 14, 1, p. M1-M11.
(Data from One Tree Reef, NE Australia, and other sources suggest post-glacial coral reefs in Great Barrier Reef probably date from only ~9,000 years ago, likely growing on elevated parts of irregular karst surface. Growth dominantly vertical because of rapid sea-level rise, with recent lateral growth mainly in leeward direction)

Davies, P.J. & J. Marshall (1985)- *Halimeda* bioherms-low energy reefs, northern Great Barrier Reef. In: M. Harmelin Vivien & B. Salvat (eds.) Proc. 5th International Coral Reef Symposium, Tahiti 1985, 5, p. 1-7.
(Holocene bioherms of accumulations of green alga Halimeda cover large areas of outer shelf in 30-50m depths in N Great Barrier Reef, behind shelf edge reefs (see also Marshall and Davies 1988))

Davies, P.J., P.A. Symonds, D.A. Feary & C.J. Pigram (1988)- Facies models in exploration- the carbonate platforms of North-East Australia. Australian Petroleum Exploration Assoc. (APEA) Journal 28, 1, p. 123-143.

Davies, P.J., P.A. Symonds, D.A. Feary & C.J. Pigram (1989)- The evolution of the carbonate platforms of Northeast Australia. In: P.D. Crevello et al. (eds.) Controls on carbonate platform and basin development, Society for Sedimentary Geology (SEPM) Special Publ. 44, p. 233-258.
(Carbonate platforms of NE Australia (Great Barrier Reef, Queensland, Marion and Eastern Plateaus S of PNG) contain record complex interactions over past 60 My. Size, shape, and location of carbonate platforms determined by continental rifting. N-ward plate movement controlled distribution of climate facies in Great Barrier Reef sequence. Rising and high sea-level periods favored increased carbonate deposition, falling low sea-levels restricted carbonate deposition. Oceanographic factors affected platform evolution, e.g., inhibition of reef development by high oceanic-phosphate levels during E-M Miocene. Development of foreland basin on N edge of NE Australian region initially caused dramatic expansion of carbonate facies, but ultimately terminated carbonate deposition as result of uplift and inundation by clastic detritus)

Davies, P.J., P.A. Symonds, D.A. Feary & C.J. Pigram (1989)- The evolution of the carbonate platforms of Northeast Australia. Geological Society Australia, Special Publ. 18, 1991, p. 44-78.
(same paper as above)

De Neve, G.A. (1977)- Coral studies of Eastern Indonesia. Part I. Berita Geologi (Geosurvey Newsletter), Direktorat Geologi, Bandung, 9, 33, p. 350-359.

De Neve, G.A. (1980)- Coral studies of Eastern Indonesia. Part II. Berita Geologi (Geosurvey Newsletter), Direktorat Geologi, Bandung, 12, 14, p.

De Neve, G.A. (1982)- Development and origin of the Sangkarang reef archipelago (South Sulawesi, Indonesia). Proc. 10th Annual Conv. Indonesian Association Geologists (IAGI), Bandung 1981, p. 102-108.
(Sangkarang (=Spermonde) platform large archipelago of reefs off SW Sulawesi, probably on submerged Pleistocene abrasion platform. Subsurface probably Eocene- Oligocene deep marine sediments and Oligo-Miocene shelfal carbonates and volcanics, similar to adjacent S Sulawesi)

De Neve, G.A. (1982)- Reef distribution in the Sunda strait (Krakatau), the West Java Sea and the Flores Sea. Proc. 11th Annual Conv. Indonesian Association Geologists (IAGI), Jakarta, p. 99-113.
(online at: https://www.iagi.or.id/web/digital/35/PIT-IAGI-1982-Paper-11.pdf)
(1883 Krakatoa eruption destroyed marine life temporarily in 100 km radius, by huge amounts of tephra covering sea surface and seafloor. Followed by rapid re-colonization of coral reefs in <50 years, with 66 coral genera)

De Neve, G.A. (1983)- Aspects of geohydrology in coral reef atolls of the Kai and Tanimbar Islands, Southern Moluccas. Proc. 12th Annual Conv. Indonesian Association Geologists (IAGI), Yogyakarta, p. 115-126.
(online at: https://www.iagi.or.id/web/digital/37/PIT-1983-Paper-11.pdf)
(General discussion of modern coral reefs and freshwater lens in Kai and Tanimbar islands))

De Vantier, L., Suharsono, A. Budiyanto, J. Tuti, P. Imanto & R. Ledesma (1998)- Status of coral communities of Kepulauan Seribu, 1985-1995. Proc. Coral reef evaluation workshop, Kepulauan Seribu, Jakarta, September 1995, p. 1-26.

DeVantier, L.M. & E. Turak (2009)- Coral reefs of Brunei Darussalam. Fisheries Department, Ministry of industry and primary resources, Brunei Darussalam, p. 1-99.

Disiyona, A. & A.H. Satyana (2023)- Carbonate characteristics of Banyu Urip, Kerendan, Arun, and Natuna D-Alpha Fields: Cenozoic isolated carbonate platforms as major reservoirs in Indonesia. In: E.C. Rankey & M.C. Poppelreiter (eds.) Cenozoic isolated carbonate platforms- Focus Southeast Asia, Society for Sedimentary Geology (SEPM) Special Publ. 114, p. 1-24.
(Review of main oil-gas bearing late Oligocene- Mio/Pliocene isolated carbonate platforms in W Indonesia)

Done, T. (2011)- Indonesian Reefs. In: D. Hopley (ed.) Encyclopedia of modern coral reefs; structure form and process, Springer Verlag, Dordrecht, p. 594-600.

Dorobek, S.L. (2008)- Tectonic and depositional controls on syn-rift carbonate platform sedimentation. In: J. Lukasik & J.A. Simo (eds.) Controls on carbonate platform and reef development, Soc. Sedimentary Geology (SEPM) Special Publ. 89, p. 57-81.
(Review of tectonic controls of carbonate platforms, with examples from Miocene-recent offshore Vietnam)

Dorobek, S.L. (2008)- Carbonate-platform facies in volcanic-arc settings: characteristics and controls on deposition and stratigraphic development. In: A.E. Draut et al. (eds.) Formation and applications of the sedimentary record in arc collision zones, Geological Society of America (GSA), Special Paper 436, p. 55-90.

Droxler, A.W. & S.J. Jorry (2013)- Deglacial origin of barrier reefs along low-latitude mixed siliciclastic and carbonate continental shelf edges. Annual Review Marine Science 5, p. 165-190.
(Modern coral barrier reefs extend along edges of some low-latitude siliciclastic shelves for 10's-1000's of km (Great Barrier Reef, NE Australia). Onset of rapid sea-level rise during early deglaciations was opportune time for coralgal communities establishment on top of maximum lowstand siliciclastic coastal deposits (beach ridges, lowstand shelf-edge deltas). Most modern barrier reefs relatively thin (~120m), late-Quaternary deposits, dating from mid Brunhes (~400 ky?) to Recent, composed of 4-5 stacked coralgal units, separated by exposure horizons (reflecting 100,000-year glacial-interglacial cycles) and covering older nonreefal, often siliciclastic deposits. Includes examples from Gulf of Papua)

Eberli, G.P., F.S. Anselmetti, A.R. Isern & H. Delius (2010)- Timing of changes in sea-level and currents along Miocene platforms on the Marion Plateau. In: W.A. Morgan, A.D. George et al. (eds.) Cenozoic carbonate systems of Australasia, Soc. Sedimentary Geology (SEPM), Special Publ. 95, p. 219-242.
(N and S Marion Platforms off NE Australia studied by ODP 194 wells and seismic. Built by cool, subtropical faunal assemblages and asymmetric geometry. Four megasequences subdivided into 14 sequences. E-M Miocene sequences are prograding and aggrading sequences. From late M Miocene, mounded geometries in basinal area where large drift deposits accumulated. Two most prominent sequences boundaries are drowning unconformities, at 11.1 Ma (N) and ~7 Ma (S Marion Platform). Timing of many Neogene sequence boundaries coincides with boundaries on Queensland Plateau (ODP Leg 133) and along Bahamas Transect (ODP Leg 166), suggesting global synchroneity of Neogene 3rd order sea-level changes)

Edinger, E.N. (1998)- Effects of land-based pollution on Indonesian coral reefs; biodiversity, growth rates, bioerosion, and applications to the fossil record. Ph.D. Thesis, McMaster University. Hamilton, p. 1-297.
(Pollution damage measured in surveys of 8 Java Sea reefs and 8 reefs in Ambon and Sulawesi. Reefs subject to land-based pollution 30-60% less diverse at 3-10m depth. Polluted reefs dominated by massive and submassive corals, and have almost no Acropora corals. Unpolluted reefs dominated by Acropora at 3m and by branching or foliose corals at 10m)

Edinger, E.N., J. Kolasa & M.J. Risk (2000)- Biogeographic variation in coral species diversity on coral reefs in three regions of Indonesia. Diversity and Distribution 6, p. 113-127.
(Coral species diversity along transects from 14 reefs in Ambon S Sulawesi and Java Sea. Sites relatively unaffected by land-based pollution in E Indonesia 20% more diverse than Java Sea. Despite fact that Java Sea was exposed during Pleistocene lowstands, and was recolonized only within last 10 000 years, coral species diversity and assemblage composition on Java Sea reefs similar to open ocean reefs in E Indonesia)

Ehrenberg, S.N. (2004)- Porosity and permeability in Miocene carbonate platforms of the Marion Plateau, offshore NE Australia: relationships to stratigraphy, facies and dolomitization. In: C.J.R. Braithwaite et al. (eds.) The geometry and petrogenesis of dolomite hydrocarbon reservoirs, Geological Society, London, Special Publ. 235, p. 233-253.
(Analyses of porosity and permeability in two Miocene carbonate platforms cored by ODP Leg 194, seaward of Great Barrier Reef, at N Marion Platform mostly preserved as limestone) and S Marion Platform (mostly dolomitized))

Ehrenberg, S.N., G.P. Eberli & G. Baechle (2006)- Porosity-permeability relationships in Miocene carbonate platforms and slopes seaward of the Great Barrier Reef, Australia (ODP Leg 194, Marion Plateau). Sedimentology 53, p. 1289-1318.
(Porosity-permeability analyses of Early- Late Miocene platform and deep water carbonates cored on Marion Plateau. Platforms experienced widely varying calcite cementation, dolomitization and dissolution but little evidence of meteoric diagenesis, suggesting subaerial exposure played little role in porosity-permeability evolution. Permeability controlled by grain size and calcite cement content in grainstones and shelter pores and vugs in mud-rich samples. Dolomitization reduces permeability variation. 'Windward' (current-facing) settings overall higher permeability (less muddy depositional facies, greater cementation, and lesser grain dissolution))

Ehrenberg, S.N., J.M. McArthur & M.F. Thirlwall (2006)- Growth, demise and dolomitization of Miocene carbonate platforms on the Marion Plateau, Offshore NE Australia. Journal of Sedimentary Research 76, p. 91-116.
(Sr-isotope stratigraphy used to determine timing of depositional events and dolomitization in two Miocene carbonate platforms cored by ODP Leg 194, seaward of Great Barrier Reef. Initial transgression of Marion Plateau volcanic basement E Oligocene (29-31 Ma). Main growth of carbonate platforms in Miocene (23-7 Ma), with five depositional sequences. Both platform-demise events (10.7 and 6.9 Ma) coincide with falls in global sea level combined with decreasing water temperature)

Escher, B.G. (1920)- Koraalriffen en bodembewegingen, met een brief van W.M. Davis. Natuurkundig Tijdschrift voor Nederlandsch-Indie 79, p. 27-45.
(online at: www.biodiversitylibrary.org/item/123958#page/545/mode/1up)
('Coral reefs and earth movements, with a letter from W.M. Davis'. On relations between patterns of coral reef growth and uplift- subsidence trends. Tested on Indonesia examples)

Escher, B.G. (1920)- Atollen in den Nederlandsch-Oost-Indischen Archipel. De riffen in de groep der Toekang Besi-eilanden. Mededelingen Encyclopedisch Bureau, Batavia, 22, p. 1-18.
('Atolls in the Netherlands East Indies Archipelago: the reefs in the Tukang Besi Group', SE Sulawesi'. Some of modern Tukang Besi reefs true atolls, up to 48km long, some small barrier reefs around islands up to 274m high. Reefs arranged in four NW-SE trending rows, possibly controlled by underlying structure)

Fairbridge, R.W. (1950)- Recent and Pleistocene coral reefs of Australia. Journal of Geology 58, 4, p. 330-401.

Fairbridge, R.W. (1973)- Geomorphology of the reef islands. In: W. Manser (ed.) New Guinea barrier reefs. University of Papua New Guinea, Geology Department, Port Moresby, Occasional Paper 1, p. 129-146.

Feary, D.A., P.J. Davies, C.J. Pigram & P.A. Symonds (1991)- Climatic evolution and control on carbonate deposition in northeast Australia. Palaeogeogr. Palaeoclim. Palaeoecology 89, p. 341-361.
(Oxygen isotope data from DSDP holes in SW Pacific used to compile paleotemperature curve for Cenozoic of offshore NE Australia (Great Barrier Reef area): subtropical in Paleo-Eocene and Miocene, temperate in Oligocene, tropical in Pliocene- Recent. Reflects interaction between paleoclimate and N-ward motion of Australian plate)

Feary, D.A., P.A. Symonds, P.J. Davies, G.J. Pigram & R.D. Jarrard (1993)- Geometry of Pleistocene facies on the Great Barrier Reef outer shelf and upper slope seismic stratigraphy of Sites 819, 820 and 821. In: J.A. McKenzie et al. (eds.) Proc. Ocean Drilling Program (ODP), Scientific Results, 133, College Station, p. 327-343.

(online at: www-odp.tamu.edu/publications/133_SR/VOLUME/CHAPTERS/sr133_24.pdf)

Flamand, B., G. Cabioch, C. Payri & B. Pelletier (2008)- Nature and biological composition of the New Caledonian outer barrier reef slopes. Marine Geology 250, p. 157-179.
(Grande Terre island of New Caledonia enclosed by one of longest barrier reefs in world. Forereef slopes from 40- 320m depth with 7 sedimentary facies. From upper reef slopes to ~90m thick coralline algal crusts dominant. Three groups: (C), shallowest, mainly mastophorids (Hydrolithon, Lithoporella, Neogoniolithon) and Lithophyllum); (B) Lithophyllum spp, Mesophyllum and Peyssonnelia from 15-40m; (A) rich in Mesophyllum, Peyssonnelia, Sporolithon on deep reef slopes up to 90m. Below ~90m encrusting foraminifera acervulinids progressively replace coralline algal crusts)

Flugel, E. (1988)- *Halimeda*: paleontological record and palaeoenvironmental significance. Coral Reefs 6, p. 123-130.
(Halimediform algae in carbonate rocks since U Triassic. Some 30 species described, in four 'genera'. Recent Halimeda in lagoonal and reefal environments. Reinvestigation of Boueina limestones from Norian-Rhaetian lagoonal carbonates of W Thailand indicates important role of alga (up to 60% Boueina marondei n. sp.) in sediment accumulation since Late Triassic)

Flugel, E. (1982)- Evolution of Triassic reefs: current concepts and problems. Facies 6, p. 297-327.
(Norian and Rhaetian reefs known from many parts of the Tethys, incl. Seram, Timor in E Indonesia)

Flugel, E. (2002)- Triassic reef patterns. In: W. Kiessling et al. (eds.) Phanerozoic reef patterns, Soc. Sedimentary Geology (SEPM) Special Publ. 72, p. 391-463.
(Includes summaries of known Triassic reefal carbonates in Timor (various localities with Norian reef sponges and corals), Sulawesi, C-E Seram (up to 150m thick sponge-coral-hydrozoan limestone; Wilckens 1937), Papua New Guinea. (Triassic limestone development in Indonesia appears to follow trends across Tethys: first reef optimum in earliest Carnian (sponge-dominated), decrease in LateCarnian, second reef optimum in Late Norian- Rhaetian (sponge-coral and coral dominated); JTvG)

Flugel, E. & B. Senowbari-Daryan (2001)- Triassic reefs of the Tethys. In: G.D. Stanley (ed.) The history and sedimentology of ancient reef systems, Topics in Geobiology, Kluwer, New York, 17, p. 217-249.
(Evolution of Triassic reefs started with ~12 Myr global crisis of metazoan reef ecosystem after Permian-Triassic mass extinction), followed by recovery during M Triassic. Reef systems differentiated during U Triassic but were severely affected by global crisis at Triassic-Jurassic boundary)

Friedman, G.M. (1983)- Reefs and porosity: examples from the Indonesian Archipelago. Proc. SE Asia Petroleum Exploration Society (SEAPEX) 6, p. 35-40.
(Most porosity in Tertiary reefal carbonates in Indonesia involves post-depositional diagenetic changes)

Friedman, G.M. (1988)- Case histories of coexisting reefs and terrigenous sediments: the Gulf of Eilat (Red Sea), Java Sea, and Neogene basin of the Negev, Israel. In: L.J. Royle & H.H. Roberts (eds.) Carbonate clastic transitions, Elsevier Developments in Sedimentology 42, p. 77-97.

Fulthorpe, C.S. & S.O. Schlanger (1989)- Paleo-oceanographic and tectonic settings of Early Miocene reefs and associated carbonates of offshore Southeast Asia. American Assoc. Petroleum Geol. (AAPG) Bull. 73, 6, p. 729-756.
(Late Oligocene- early M Miocene widespread carbonates/reefs in SE Asia, related to rising eustatic sea level and expansion of coral-algal facies belt N to Japan and S to New Zealand. Examples mainly from Philippines)

Gallagher, S.J., L. Reuning, T. Himmler, J. Henderiks, D. De Vleeschouwer, J. Groeneveld, A. Rastigar Lari et al. (2018)- The enigma of rare Quaternary oolites in the Indian and Pacific Oceans: A result of global oceanographic physicochemical conditions or a sampling bias? Quaternary Science Reviews 200, p. 114-122.
(The Indo-Pacific area stands out as region without modern marine oolites, especially during Quaternary (the "ooid enigma"). Recent coring by IODP 356 off W Australia shows common ooid horizons in Pleistocene up to

730,000 years old. Increased aridity associated with higher alkalinity conditions during glacials probably facilitated ooid precipitation on tropical carbonate platforms particularly offshore arid Australia)

Gallagher, S.J., M.W. Wallace, P.W. Hoiles & J.M. Southwood (2014)- Seismic and stratigraphic evidence for reef expansion and onset of aridity on the North West Shelf of Australia during the Pleistocene. Marine and Petroleum Geology 57, p. 470-481.
(Previously unknown series of drowned fossil reefs in NW Australia shelf described. Reefs formed around 0.5 Ma with oldest ooids in Indian Ocean. Reef expansion partly due to increased Leeuwin Current intensity. Tropical facies expanded with onset of aridification of Australia after 0.6 Ma)

Gerth, H. (1925)- Die Bedeutung der Tertiaeren Riffkorallenfauna des malaysischen Archipels fur die Entwicklung der lebenden Rifffauna im Indopazifischen und Atlantischen Gebiet. Verhandelingen Geologisch-Mijnbouwkundig Genootschap Nederland Kolonien, Geologische Serie 8 (Gedenkboek Verbeek, memorial volume), p. 173-196.
(online at: https://books.google.com/books?id=Yy0RAAAAIAAJ&pg)
('The significance of the Tertiary reef coral fauna of the Malay Archipelago (=Indonesia) for the development of the living reef fauna in the Indo-Pacific and Atlantic area'. On global distributions of Paleogene- Recent reef corals)

Gerth, H. (1930)- The evolution of reef corals during the Cenozoic period. Proc. 4th Pacific Science Congress, Java 1929, 2A, p. 333-350.
(Modern reef corals two distinct provinces, Indo-Pacific and Atlantic, with higher diversity in Indo-Pacific. Known genera, more than on modern reefs. In Paleogene-Miocene reef corals more widely distributed (up to ~50°N) than today (~32°N). No figures)

Girard, E.B., Estradivari, S. Ferse, R. Ambo-Rappe, J. Jompa & W. Renema (2022)- Dynamics of large benthic foraminiferal assemblages: a tool to foreshadow reef degradation? Science of the Total Environment 811, 151396, p. 1-11.
(online at: https://www.sciencedirect.com/science/article/pii/S0048969721064743)
(About changes in living assemblages of larger foraminifera on reef flats of 12 islands in Spermonde Archipelago (S Sulawesi) between 1997 and 2018. Shift from typical foraminifera in coral-dominated reef habitats (Amphistegina lobifera, A. radiata, Calcarina spengleri, Heterostegina depressa) to fleshy algae-dominated reef assemblages (Neorotalia gaimardi, C. mayori). Other species (e.g., Elphidium spp., Peneroplis planatus, Sphaerogypsina globulus) reflect anthropogenic pollution from nearby islands and mainland). Changes in larger foram assemblages indicate the reef province is degrading)

Goldberg, W.M. (2013)- The biology of reefs and reef organisms. The University of Chicago Press, p. 1-401.
(Modern textbook on Recent carbonate reefs and their organism. Modern reefs clear, warm, low-nutrient waters and are not found far outside 30° from Equator. With review of reef-building organism through time since Precambrian)

Green, A.L. & P.J. Mous (2008)- Delineating the Coral Triangle, its ecoregions and functional seascapes. The Nature Conservancy, TNC Coral Triangle Program, Report 1/08, p. 1-34.
(online at: https://www.conservationgateway.org/Documents/Green%20and%20Mous%202008%20CT%20Delineation%20v5%200.pdf)
(Review and maps of the present-day 'Coral Triangle' ecoregion, the epicenter of coral diversity, spanning E Indonesia, the Philippines and the PNG archipelagoes (Bismarck-Solomon Seas ecoregion))

Greenlee, S.M. & P.J. Lehmann (1993)- Stratigraphic framework of productive carbonate buildups. In: R.G. Loucks et al. (eds.) Carbonate sequence stratigraphy: recent developments and applications, American Assoc. Petroleum Geol. (AAPG), Memoir 57, p. 43-62.

Gutteridge, P., J. Garland, B. Vincent & S. Kettle (2011)- Southeast Asian carbonate systems and reservoir development: an up-to-date synthesis. Cambridge Carbonates Ltd., p. 1-600. *(Unpublished report*

(Selected parts online at: www.cambridgecarbonates.com/assets/se-asian-carbonate-systems-and-reservoir-development-report---sample.pdf)
(Major review of existing and future hydrocarbon potential of Tertiary carbonate systems of SE Asia, with chapters on N and S Sumatra, Java, offshore Vietnam/ S China, Sarawak/ Philippines/ Natuna Sea, E Kalimantan, S Sulawesi/ S Makassar Basin, E Sulawesi, W Papua, Papua New Guinea)

Halfar, J. & M. Mutti (2005)- Global dominance of coralline red-algal facies: a response to Miocene oceanographic events. Geology (GSA) 33. 6, p. 481-484.
(Global rhodalgal facies peak abundances in Burdigalian-E Tortonian (16-11 Ma). Dominance of red algae over coral reefs triggered by Burdigalian global increase in productivity (higher C- isotope values). Rhodalgal lithofacies expanded further in M Miocene when strengthened thermal gradients associated with establishment of E Antarctic Ice Sheet led to enhanced upwelling, while increased weathering rates introduced land-derived nutrients into oceans. Cooler temperatures following E-M Miocene climatic optimum contributed to sustain dominance of red algae)

Hallock, P. & L. Pomar (2008)- Cenozoic photic reef and carbonate ramp habitats: a new look using paleoceanographic evidence. Proc. 11th International Coral Reef Symposium, Fort Lauderdale 2008, p. 1-5.

Hallock, P. & L. Pomar (2012)- Cenozoic evolution of carbonate shelf and ramp habitats: insights from paleoceanography. AAPG Annual Convention Exhib., Long Beach 2012, Search and Discovery Article 50663, p. 1-42. *(Abstract + Presentation)*
(online at: www.searchanddiscovery.com/documents/2012/50663hallock/ndx_hallock.pdf)
(On relationships between carbonate deposition and Greenhouse vs Icehouse conditions. Large Benthic Forams assemblages most diverse when deeper waters were warmest, with high extinction rates during cooling (increase of surface to thermocline gradients). Aragonite production by corals more widespread during ice-house conditions)

Hantoro, W.S. (1994)- Batugamping terumbu koral Kwarter terangkat di Timor. Proc. 23rd Annual Conv. Indonesian Association Geologists (IAGI), Jakarta, 1, p. 192-207.
(online at: https://www.iagi.or.id/web/digital/62/18.pdf)
('Uplifted Quaternary coral reef limestones of Timor'. Uplifted marine coral reef limestone terraces across much of Timor, up to 1200m a.s.l. Unconformable on older rocks. In Kupang area 8 Late Pleistocene terraces up to ~120m elevation, suggesting uplift rate of W tip of Timor 0.35-0.45 mm/yr)

Hantoro, W.S., N. Nganro, S. Shofiyah, I. Narulita & J. Sofjan (1997)- Recent climate variation signals from corals in Timor, Indonesia. Quaternary International 37, p. 81-87.

Harrison, G.W.M., N. Santodomingo, K.G. Johnson & W. Renema (2023)- Is the Coral Triangle's future shown in a Pliocene reef gap? Coral Reefs 42, p. 1219-1225.
(online at: https://link.springer.com/article/10.1007/s00338-023-02412-5)
(Distributions of coral reefs in center of maximum coral diversity (Coral Triangle= Indonesian Archipelago-Philippines- New Guinea) show significantly fewer coral reefs during Pliocene ('Pliocene Reef Gap'). Reefs re-established in Pleistocene. Reefs decrease not associated with drop in coral genus diversity or warming or increasing pCO2 or human factors. Regional tectonics and sea-level rise possible drivers)

Haryono, E., S.T.J. Putro, D.H. Barianto, M.H.D. Sasongko & J.B. Setiawan (2022)- The formation of an open atoll in strike slip-fault setting: new insight from Maratua Island, Kalimantan-Indonesia. Environmental Earth Sciences 81, 350, p.
(Maratua Island V-shaped open atoll off NE Kalimantan, mainly controlled by sinistral fault system. Island is push-up morphology which formed a carbonate high (Pliocene transpression).

Heikoop, J.M., C.J. Tsujita, M.J. Risk & T. Tomascik (1996)- Corals as proxy recorders of volcanic activity; evidence from Banda Api, Indonesia. Palaios 11, p. 286-292.

Hillis-Colinvaux, L. (1980)- Ecology and taxonomy of *Halimeda*: primary producer of coral reefs. Advances in Marine Biology, Academic Press, 17, p. 1-327.
(online at: https://ia801401.us.archive.org/24/items/advancesinmarine80hill/advancesinmarine80hill.pdf)
(Halimeda algae important contributor to tropical reefal limestones since Cretaceous (Jurassic if Boueina included in Halimeda group))

Hoeksema, B.W. (1992)- The position of northern New Guinea in the center of marine benthic diversity: a reef coral perspective. Proc.7th International Coral Reef Symposium, Guam 1992, 2, p. 710-717.
(N New Guinea and PNG islands with exceptionally high coral diversity, part of the "East Indies center of maximum marine biodiversity")

Hoeksema, B.W. (2007)- Delineation of the Indo-Malayan centre of maximum marine biodiversity: the coral triangle. In: W. Renema (ed.) Biogeography, time and place: distributions, barriers and islands, Topics in Geobiology 29, Springer, p. 117-178.
(Ranges of many tropical marine species overlap in center of maximum marine biodiversity in Indo-Malayan region ('East Indies Triangle': Malaysia, Philippines, Indonesia and Papua New Guinea))

Hoeksema, B.W., Giyanto & Suharsono (2019)- The role of maximum shelf depth versus distance from shore in explaining a diversity gradient of mushroom corals (Fungiidae) off Jakarta. Diversity (MDPI) 11, 3, 46, p. 1-23.
(online at: https://www.mdpi.com/1424-2818/11/3/46)
(Thirty-eight coral reef sites in Jakarta Bay and Thousand Islands (Pulau Seribu) surveyed in 2005. Highest diversity of mushroom corals is on reefs surrounded by deep seafloor in central section of archipelago, not on northernmost reefs, which are farthest away from mainland)

Hoeksema, B.W. & K.S. Putra (2000)- The reef coral fauna of Bali in the center of marine diversity. In: M.K. Moosa et al. (eds.) Proc. 9th International Coral Reef Symposium, Bali 2000, 1, p. 173-178.
(online at: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.612.2947&rep=rep1&type=pdf)
(Bali coral reefs richest in Tulamben- Amed area (E Bali; mainly volcanic sand with limestone outcrops). Islands Nusa Lembongan and Nusa Penida (Lombo Straits, in SE; uplifted limestone) with special fauna elements due to cold upwelling and strong currents. At Sanur and Nusa Dua species previously known only from Pacific. Coral fauna of Bali resembles most fauna of species-rich E Indonesian areas)

Hopley, D. & Suharsono (2000)- The status of coral reefs in Eastern Indonesia. Global Coral Reef Monitoring Network (GCRMN), Australian Inst. Marine Science, p. 1-111.

Huang, D., W.Y. Licuanan, B.W. Hoeksema, C.A. Chen, P.O. Ang, H. Huang, D.J.W. Lane, S.T. Vo, Z. Waheed, Y. Affendi, T. Yeemin & L.M. Chou (2015)- Extraordinary diversity of reef corals in the South China Sea. Marine Biodiversity 45, 2, p. 157-168.
(Reefs across S China Sea with 571 known species of reef corals)

Iryu, Y. (1997)- Pleistocene fore-reef rhodoliths from the Ryukyu Islands, southwestern Japan. In: H.A. Lessios and I.G. Macintyre (eds.) Proc. 8th International Coral Reef Symposium, Panama, 1, p. 749-754.
(Well-rounded rhodoliths 1-8 cm consist of multiple species of nongeliculatecoralline algae and encrusting foraminifer Acervulina inhaerens, together forming concentric internal structure. Thought to have formed in deep fore reef to shelf, at 50-150m depth. Often associated with Cycloclypeus- Operculina foram assemblage)

Iryu, Y., S. Inagaki, Y. Suzuki & K. Yamamoto (2010)- Late Oligocene to Miocene reef formation on Kita-daito-jima, northern Philippine Sea. In: M. Mutti et al. (eds.) Carbonate systems during the Oligocene-Miocene climatic transition, Int. Association of Sedimentologists (IAS), Special Publ. 42, p. 245-256.
(Late Oligocene- Late Miocene carbonate in 433m deep borehole on Kita-daito-jima)

Iryu, Y. & S. Matsuda (1988)- Depth distribution. abundance and species assemblages of nonarticulated coralline algae in the Ryukyu Islands, southwestern Japan. In: J.H. Choat et al. (eds.) Proc. 6th International Coral Reef Symposium, Townsville 1988, 3, p. 101-106.

(Distribution of 8 non-articulated coralline algal species in upper 30m of slope of patch reef off Yonehara, Ishigaki-jima: Porolithon onkodes and Lithophyllum insipidum most abundant at depth of 1m, but absent below 20m. Spongites sp. A most common at 15m depth. Neogoniolithon conicum distributed throughout)

Iryu, Y., T. Nakamori, S. Matsuda & O. Abe (1995)- Distribution of marine organisms and its geological significance in the modern reef complex of the Ryukyu Islands. Sedimentary Geology 99, p. 243-258.
(Compositions of coral and coralline algal assemblages change with increasing depth. Hermatypic corals common down to 50m. Coralline algae Hydrolithon onkodes limited to upper 10m. Algal nodules with encrusting foram Acervulina inhaerens (rhodoliths) most abundant constituent on island shelf, commonly with Cycloclypeus carpenteri (50-150m). In Ryukus negligible Halimeda; probably two types of shelves in tropical-subtropical regions: nutrient-rich Halimeda-dominant and nutrient-poor rhodolith-dominant)

Iryu, Y., T. Nakamori & T. Yamada (1998)- Pleistocene reef complex deposits in the Central Ryukus, south-western Japan. In: G.F. Camoin & P.J. Davies (eds.) Reefs and carbonate platforms in the Pacific and Indian Oceans, Int. Association of Sedimentologists (IAS), Special Publ. 25, p. 197-213.
(Pleistocene carbonates of Ryuku Group with extensive rhodoliths in distal parts of reef complex. Four facies: (1) coral (reef- reef slope; 0-50m), (2) rhodolith (insular shelf 50-150m), (3) Cycloclypeus-Operculina (associated with rhodoliths; 50-150m) and (4) poorly sorted detrital limestones (insular shelf, >50m))

Isern, A., J.A. McKenzie & D.R. Muller (1993)- Paleoceanographic changes and reef growth off the northeastern Australian margin: stable isotope data from Leg 133, Sites 811 and 817 and Leg 21 Site 209. Proc. Ocean Drilling Program (ODP), Scientific Results, 133, p. 263-280.
(online at: www-odp.tamu.edu/publications/133_SR/VOLUME/CHAPTERS/sr133_19.pdf)
(Oxygen isotopes from Holes 811A, 817A indicate extensive reef growth on Queensland Plateau in M Miocene before 12 Ma, signifying surface-water T of 20°C or more. Decrease in reefal detritus in Late Miocene (10.0-5.2 Ma) corresponds with isotopic data from planktonic foraminifera suggesting cooler surface waters (16°-19°C). This may have contributed to demise of reefs on Queensland Plateau. Surface waters remained cool until M Pleistocene (1.2- 0.5 Ma), when surface-water T increased to 25 °C and Great Barrier Reef initiated)

Isern, A.R., J.A. McKenzie & D.A. Feary (1996)- The role of sea-surface temperature as a control on carbonate platform development in the western Coral Sea. Palaeogeogr. Palaeoclim. Palaeoecology. 124, p. 247-272.

Isern, A.R., F.S. Anselmetti, P. Blum and Leg 194 Scientific Shipboard Party (2001)- Ocean Drilling constrains carbonate platform formation and Miocene sea level on the Australian margin. EOS 82/41, p. 469-476.

Isern, A.R., F.S. Anselmetti & P. Blum (2004)- A Neogene carbonate platform, slope and shelf edifice shaped by sea level and ocean currents, Marion Plateau (Northeast Australia). In: G.P. Eberli et al. (eds.) Seismic imaging of carbonate reservoirs and systems, American Assoc. Petroleum Geol. (AAPG), Memoir 81, p. 291-307.
(Marion Plateua off NE Australia large drowned carbomate platform, composed of cool, subtropical organisms, such as red algae, bryozoans, and larger foraminifera. Coralline algae notably absent. Onlapped by deep water prograding drift deposits)

Jambak, M.A. & R.K. Mahendra (2024)- A bibliometric analysis of carbonate paragenesis. Scientific Contributions Oil and Gas (SCOG), Lemigas, 46, 3, p. 129-144.
(online at: https://journal.lemigas.esdm.go.id/index.php/SCOG/article/view/1590/pdf)
(987 publications on carbonate paragenesis in 1999-2022)

Jambak, M.A., D. Syavitri, H.F. Yuda, Ovinda, S.D. Hafiz, Rendy & Fachry Muhammad (2022)- Quaternary-Recent reef facies model in Seribu Islands- Jakarta Bay, DKI Jakarta. Int. J. Multidisciplinary Research and Publications (IJMRAP) 5, 1, p. 174-178.
(online at: https://ijmrap.com/wp-content/uploads/2022/07/IJMRAP-V5N1P88Y22.pdf)
(Study of facies, coral assemblages, etc., of Thousand Islands patch reefs in W Java Sea near Jakarta)

James, N.P., L.B. Collins, Y. Bone & P. Hallock (1999)- Rottnest shelf to Ningaloo reef: coolwater to warm-water carbonate transition on the continental shelf of Western Australia. Journal of Sedimentary Research 69, p. 1297-1321.
(W continental margin of Australia, from Cape Naturaliste to NE Cape, 1200km long and with carbonate deposition throughout. Temperate (cool) water in S to tropical in N, influenced by Leeuwin current)

Janssen, A., A. Wizemann, A. Klicpera, D.Y. Satari, H. Westphal & T. Mann (2017)- Sediment composition and facies of coral reef islands in the Spermonde Archipelago, Indonesia. Frontiers in Marine Science 4, 144, p. 1-13.
(online at: https://www.frontiersin.org/articles/10.3389/fmars.2017.00144/full)

Jell, J.S. & P.G. Flood (1977)- Guide to the geology of reefs of the Capricorn and Bunker groups, Great Barrier Reef Province, with special reference to Heron Reef. Papers Dept. Geology, University of Queensland 8, 3, p. 1-85.
(online at: http://espace.library.uq.edu.au/eserv/UQ:312024/Dept_Geology_Papers_VIII_3_p1_85.pdf)

Jenkins, S., R. Swarbrick, A. Mallon & S. O'Connor (2012)- Pressure in Miocene carbonate exploration targets. Proc. 36th Annual Conv. Indonesian Petroleum Association Jakarta, IPA12-G-046, p. 1-16.
(Includes examples of overpressured fields in Arun and NSO fields, N Sumatra, NW Java, E Java, etc.)

John, C.M. & M. Mutti (2005)- The response of Heterozoan carbonate systems to paleoceanographic, climatic and eustatic changes: a perspective from slope sediments of the Marion Plateau (ODP Leg 194). Journal of Sedimentary Research 75, p. 216-236.
(On relative control of paleoceanography, eustasy, and temperature on evolution of Marion Plateau (NE Australia) carbonates. Several carbonate platforms started in E Miocene, composed mainly of heterozoans. Carbon isotope record revealed cycles of 409 Kyr (eccentricity) and 1800 Kyr (long-term eustatic change))

Johnson, K.G., W. Renema, B.R. Rosen & N. Santodomingo (2015)- Old data for old questions: what can the historical collections really tell us about the Neogene origins of reef-coral diversity in the Coral Triangle? Palaios 30, 1, p. 94-108.
(Updated stratigraphy and revised taxonomic determinations for important historical collections of Cenozoic fossil corals from Indonesia in Leiden museum reveal Pliocene and Paleogene sampling gaps. E Miocene increase in richness followed by plateau of relatively high richness. Observed patterns of taxonomic turnover highly correlated with sample size. Taxonomic revision reduced number of genera and species from 133 and 404 to 115 and 321)

Johnson, K.G., B.R. Rosen, N. Santodomingo & W. Renema (2011)- Southeast Asian and Caribbean Cenozoic reef-coral diversity and the importance of new collections. In: Abstracts 11th Symposium Fossil Cnidaria and sponges, Liege 2011, Kolner Forum Geol. Palaontologie 19, p. 67-68. *(Extended Abstract)*
(SE Asia fossil coral collections at Naturalis Museum, Leiden, contain 271 species from 210 localities. Late Oligocene- Early Miocene interval of increased diversification, coinciding with expansion in coral reef development. No intervals of accelerated extinction seen in Neogene)

Jordan, C.F. (1998)- Kepulauan Seribu, West Java Sea, Indonesia: a modern reef analog for Miocene oil and gas fields in Southeast Asia. Proc. 26th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, 1, p. 71-83.

Jordan, C.F. (1998)- The sedimentology of Kepulauan Seribu: a modern path reef complex in the West Java Sea, Indonesia. Indonesian Petroleum Association, Jakarta, Field Guide, p. 1-81.
(online at: https://www.academia.edu/40324632/THE_SEDIMENTOLOGY_OF_KEPULAUAN_SERIBU_A_MODERN_PATCH_REEF_COMPLEX_IN_THE_WEST_JAVA_SEA_INDONESIA)
(Fieldtrip guidebook to 'Thousand Islands' modern patch reefs complex NW of Jakarta.With identifications and distributions of corals, etc.))

Jordan, C., H. Roberts et al. (1999)- Probing the third dimension of the reef complex at Kepulauan Seribu. Berita Sedimentologi (FOSI- IAGI) 10, p. 3. *(Abstract Only)*
(online at: https://journal.iagi.or.id/index.php/FOSI/article/view/273/243)
(Brief proposal for 1999 shallow seismic and coring program around Pulau Seribu, NW of Jakarta))

Keith, S.A., A.H. Baird, T.P. Hughes, J.S. Madin & S.R. Connolly (2013)- Faunal breaks and species composition of Indo-Pacific corals: the role of plate tectonics, environment and habitat distribution. Proc. Royal Society (London) B 280, 20130818, p. 1-9.
(online at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3774232/pdf/rspb20130818.pdf)
(On concordance between geological features and coral biogeographical structure)

Kench, P.S. & T. Mann (2017)- Reef island evolution and dynamics: insights from the Indian and Pacific Oceans and perspectives for the Spermonde Archipelago. Frontiers in Marine Science 4, 145, p. 1-17.
(online at: https://www.frontiersin.org/articles/10.3389/fmars.2017.00145/full)

Kiessling, W., C. Simpson & M. Foote (2010)- Reefs as cradles of biodiversity in the Phanerozoic. Science 327, p. 196-198.

Koesoemadinata, R.P. (1984)- Introduction to Tertiary carbonate deposition in Southeast Asia. ASCOPE Technical Presentations 2, p. 57-68.

Kuenen, P.H. (1933)- Geology of coral reefs. In: Scientific results of the Snellius Expedition in the Eastern part of the Netherlands East Indies (1929-1930), 5, Geological results 2, Kemink, Utrecht, p. 1-125.
(online at: https://www.delpher.nl/nl/boeken/view?identifier=MMKB24:082134000:00133)
(Comprehensive review of modern coral reefs in 31 areas across Indonesia. Including discussions on growth of coral reefs, formation of atolls, etc.)

Kuenen, P.H. (1933)- The formation of the atolls in the Toekang-Besi-group by subsidence. Proc. Koninklijke Nederlandse Akademie van Wetenschappen, Amsterdam 36, 3, p. 331-336.
(online at: https://dwc.knaw.nl/DL/publications/PU00016412.pdf)
(Tukang Besi atolls and raised islands arranged along NW-SE fault trends. Post-Pleistocene subsidence produced atolls where reef growth kept up with subsidence)

Lallier, F., G. Caumon, J. Borgomano, S. Viseur, F. Fournier, C. Antoine & T. Gentilhomme (2012)- Relevance of the stochastic stratigraphic well correlation approach for the study of complex carbonate settings: application to the Malampaya buildup (Offshore Palawan, Philippines). In: J. Garland et al. (eds.) Advances in carbonate exploration and reservoir analysis, Geological Society, London, Special Publ., 370, p. 265-275.
(On stochastic stratigraphic well correlation in U Eocene- Lw Miocene Malampaya buildup off Palawan Island, where petrophysical properties mainly controlled by diagenesis)

Lanaru, M. & R. Fitri (2008)- Sediment deposition in a South Sulawesi seagrass bed. Marine Res. Indonesia 33, 2, p. 221-224.
(online at: http://isjd.pdii.lipi.go.id/admin/jurnal/33208221224.pdf)
(Deposition of suspended sediment measured with sediment traps in shallow waters colonized by Thallasia seagrass at Pannikiang Island, SW Sulawesi. Sediment deposition higher in vegetated areas than in unvegetated areas, suggesting sediment deposition promoted by dense seagrass)

Lapointe, P. & J. Hurst (1996)- Tertiary carbonate petroleum system in South East Asia. Proc. 11th Offshore Southeast Asia Conference Exhibition (OSEA96), Singapore 1996, p. 177-184.
(General paper, observing Miocene reefs are good oil-gas reservoirs and comparable to present-day systems)

Leslie, W. (1976)- The significance to Indonesia of hydrocarbon production from carbonate reservoirs. Proc. Indonesian Petroleum Association (IPA) Carbonate Seminar, Jakarta 1976, Special Volume, p. 1-5.

Liu, J., L. Cao, W. Xu, G. Li, R. Xiang, X. Su, Y. Luo, J. Cheng, X. Xu, Z. Zhao &W. Yan (2022)- Formation and development of coral reefs in the South China Sea. Palaeogeogr. Palaeoclim. Palaeoecology 594, p. 1-12.
(Study of Meiji coral reef in Nansha Islands, S China Sea. Developed on top of volcanic basement. Eight stages since Late Oligocene (~26 Ma). Five main exposure surfaces, almost 1000-m thick coral reef)

Liu, K., C.J. Pigram, L. Paterson & C.G.St.C. Kendall (1998)- Computer simulation of a Cainozoic carbonate platform, Marion Plateau, north-east Australia. In: G.F. Camoin & P.J. Davies (eds.) Reefs and carbonate platforms in the Pacific and Indian Oceans, Int. Association of Sedimentologists (IAS), Special Publ. 25, p. 145-161.
(E Miocene- Recent modeling of Marion Plateau carbonate platform architecture, NE Australia. Platform initiated around 20 Ma sea level rise, evolved through 4 platform building phases, and drowned in E Pliocene)

Loftus, G. & C. Grant (2007)- Unlocking the remaining potential of Cenozoic aggraded carbonate platforms in SE Asia. Proc. 31st Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, IPA07-G-098, 2p.
(Abstract only; nothing new)

Lokier, S.W., M.E.J. Wilson & L.M. Burton (2009)- Marine biota response to clastic sediment influx: a quantitative approach. Palaeogeogr. Palaeoclim. Palaeoecology 281, p. 25-42. *(online at: www.academia.edu/17164222/Marine_biota_response_to_clastic_sediment_influx_A_quantitative_approach)*
(On effects of siliciclastic and volcaniclastic sediment influx on carbonate producing organisms, using samples from Miocene Wonosari Fm of S Java, Miocene Batu Putih Lst of E Borneo, and Eocene of NE Spain. Larger foraminifera and coralline algae greatest tolerance to siliciclastic sediment influx. Platy corals also in clay-dominated horizons. Branching and massive corals least tolerant to large quantities of clastics)

Longman, M.W (1993)- Southeast Asian Tertiary carbonate reservoirs. Petroconsultants, Multi-client study, 2 vols. *(Unpublished)*
(Major compilation of SE Asian Tertiary carbonates)

Longman, M.W (1993)- Future bright for Tertiary carbonate reservoirs in Southeast Asia. Oil and Gas Journal 91, 51 (20 Dec. 1993), p. 107-112.
(Worldwide, carbonate buildups serve as reservoirs for ~40 billion bbl of recoverable hydrocarbons. About 40% of this total (16 BBO equivalent), occurs in Tertiary (mainly Miocene) buildups in SE Asia)

Longman, M.W., C.T. Siemers & C.F. Jordan (1993)- Modem carbonates and their ancient counterparts in Indonesia: a guide to interpreting and understanding carbonate reservoirs. Indonesian Petroleum Association, Course Notes, p. 2.1-2.59.

Lunt, P. (2023)- Biological evolution of SE Asian carbonates, based on their microfossil content. In: E.C. Rankey & M.C. Poppelreiter (eds.) Cenozoic isolated carbonate platforms- Focus Southeast Asia, Society for Sedimentary Geology (SEPM) Special Publ. 114, p. 1-15.
(Aragonitic coral reefs already common in SE Asia by M Oligocene. Gradual change from calcite-dominance to aragonite seas through Oligocene- E Miocene associated with gradual expansion of scleractinia, green algae and mollusks, and associated decline in abundance of calcitic larger foraminifera, resulting in LF being minor component of carbonate faunas by end of M Miocene. LF extinction events reduced diversity, and appear to correlate with periods of tectonic change. Change from seasonal to ever-wet conditions around Oligo-Miocene boundary around S China Sea does not appear caused by a wider tectonic event, but did not impact LF diversity. Combined tectonic unconformity and mass extinction of LF in middle M Miocene times possibly due to plate tectonic constriction of Indonesian Throughflow between Pacific and Indian Oceans)

Lunt, P. & P. Woodroof (2023)- Tectono-stratigraphic controls on Cenozoic Southeast Asian carbonates. In: E.C. Rankey & M.C. Poppelreiter (eds.) Cenozoic isolated carbonate platforms- Focus Southeast Asia, Society for Sedimentary Geology (SEPM) Special Publ. 114, p. 85-110.
(online at: https://www.academia.edu/102441248/TECTONO_STRATIGRAPHIC_CONTROLS_ON_CENOZOIC_SOUTHEAST_ASIAN_CARBONATES)

(In SE Asia Cenozoic carbonates commonly initiated or terminated at times of tectonic change and bound by unconformities, the largest correlate over wide areas.)

Madden, R.H.C., M.E.J. Wilson & M. O'Shea (2013)- Modern fringing reef carbonates from equatorial SE Asia: an integrated environmental, sediment and satellite characterisation study. Marine Geology 344, p. 163-185.
(Sedimentology and early alteration of isolated fringing reef system of Kaledupa-Hoga in Tukang Besi Archipelago, off SE Sulawesi)

Manser, W. (ed.) (1973)- New Guinea barrier reefs: preliminary results of the 1969 coral reef expedition to the Trobriand Islands and Louisiade Archipelago, Papua New Guinea. University of Papua New Guinea, Geology Dept., Port Moresby, Occasional Paper 1, p. 1-356.

Marshall, J.F. (1982)- Internal structure and Holocene evolution of One Tree Reef, southern Great Barrier Reef. Coral Reefs 1, p. 21-28.

Marshall, J.F. & P.J. Davies (1988)- *Halimeda* bioherms of the northern Great Barrier Reef. Coral reefs 6, p. 139-148.
(Reefless tract behind ribbon reefs on outer shelf off Cooktown with common growth of Halimeda that in Holocene developed into bioherms 2- 20 m high. Origin and morphology of bioherms related to jets of nutrient-rich, upwelled oceanic water intruding onto outer shelf via narrow passes between ribbon reefs)

Marshall, J., P. Davies, I. Mihut, A. Troedson, D. Bergerson & D. Haddad (1994)- Sahul Shoals processes: neotectonics and Cainozoic environments- Cruise 122 Post Cruise Report. Australian Geological Survey Organisation (AGSO), Canberra, Record 1994/33, p. 1-73.
(online at: www.ga.gov.au/corporate_data/14776/Rec1994_033.pdf)
(Compared with Great Barrier Reef of NE Australia, NW Shelf has virtually no coral reefs. Instead, a series of young Halimeda-dominated carbonate platforms along edge of Sahul Shelf, rising from 200-350 m to 25-30 m below sea level. Some platforms may have started developing by Late Miocene. Tops of Sahul banks dominated by green alga Halimeda, some solitary corals (Fungia sp), larger foraminifera, coralline algae and bryozoans)

Marshall, J.F., Y. Tsuji, H. Matsuda, P.J. Davies, Y. Iriu, N. Honda & Y. Satoh (1998)- Quaternary and Tertiary subtropical carbonate platform development on the continental margin of southern Queensland, Australia. In: G.F. Camoin & P.J. Davies (eds.) Reefs and carbonate platforms in the Pacific and Indian Oceans. Int. Association of Sedimentologists (IAS), Special Publ. 25, p. 163-195.
(On tropical-subtropical to temperate carbonate environments along E coast of Australia. Subtropical shelf environments characterized by combination of shallow water hermatypic corals and deep-water rhodoliths. Halimeda more common towards the tropical boundary and bryozoans towards the temperate boundary)

Martin, J.M., J.C. Braga, K. Konishi & C.J. Pigram (1993)- A model for the development of rhodoliths on platforms influenced by storms: Middle Miocene carbonates of the Marion Plateau (Northeastern Australia). In: J.A. McKenzie et al. (eds.) Proc. Ocean Drilling Program (ODP), Scientific Results 133, p. 455-460.
(M Miocene carbonates of Marion Plateau consist of floatstones and rudstones dominated by rhodoliths. Corals occur only as fragments. Growth types and algal associations characteristic of rhodoliths that formed at depths of some 10's of m and below normal wave base)

Maryanto, S. (2017)- Mikrofasies batugamping: studi batugamping Paleogen-Neogen di Indonesia bagian Barat. LIPI Press, Jakarta, p. 1-378.
(online at: https://penerbit.brin.go.id/press/catalog/view/384/329/3541)
('Limestone microfacies: study of Paleogene-Neogene limestones in Western Indonesia'. Includes observations on Baturaja Fm in S Sumatra, Rajamandala Fm in W Java, Jonggrangan Fm in Yogyakarta, Sentolo Fm in Yogyakarta, Wonosari Fm in E Java, and Berai Fm in S Kalimantan)

Masaferro, J.L., R. Bourne & J.C. Jauffred (2004)- Three-dimensional seismic visualization of carbonate reservoirs and structures. In: Seismic imaging of carbonate reservoirs and systems, American Assoc. Petroleum Geol. (AAPG), Memoir 81, p. 11-41.
(On seismic imaging of carbonate buildup reservoirs, with examples from Luconia (N Borneo) and Malampaya (Philippines))

Matsuda, F., Y. Matsuda, M. Saito & R. Iwahashi (1997)- A computer simulation model for the reconstruction of the carbonate sedimentary process. In: J.V.C. Howes & R.A. Noble (eds.) Proc. Int. Conference Petroleum Systems of SE Asia and Australasia, Jakarta 1997, Indonesian Petroleum Association (IPA), p. 977-986.
(Carbonate depositional model for Pleistocene Ryuku Group, Irabu Island, SW of Japan)

Matsuda, S. &Y Iryu (2011)- Rhodoliths from deep fore-reef to shelf areas around Okinawa-jima, Ryukyu Islands, Japan. Marine Geology 282, p. 215-230.
(Rhodoliths common in deep fore-reef to shelf areas at 50-135m water depths around Okinawa-jima)

Maxwell, W.G.H. (1968)- Atlas of the Great Barrier Reef. Elsevier, Amsterdam, p. 1-268.

Mayall, M.J., A. Bent & D.M. Roberts (1997)- Miocene carbonate buildups offshore Socialist Republic of Vietnam. In: A.J. Fraser, S.J. Matthews & R.W. Murphy (eds.) Petroleum Geology of Southeast Asia, Geological Society, London, Special Publ. 126, p. 117-120.
(Variety of M. Miocene- Lower Pliocene carbonate accumulations off Vietnam. Best reservoirs in large, fault-controlled, buildups which have undergone extensive leaching during emergence. Moderate reservoir quality in platform facies which extend over large areas and in small buildups usually developed on footwall crests)

McCaffrey, J.C., S.J. Gallagher, M.W. Wallace, T. Averes, S.G. Fabian, K. Lindhorst et al. (2025)- The Rowley Shoals atolls: remnants of a Miocene great barrier reef on the north-west Australian margin. Global and Planetary Change 245, 104688, p. 1-18.
(online at: https://www.sciencedirect.com/science/article/pii/S0921818124003357)
(Three modern West Australian Rowley Shoals are remnants of 2000 km long M-L Miocene barrier reef. These ~250m high isolated atolls persisted during drowning of underlying barrier reef. Fourth shoal drowned during Pliocene due to reduced Leeuwin Current and constriction of Indonesian Throughflow after ~2.4 Ma)

McCaffrey, J.C., M.W. Wallace & S.J. Gallagher (2020)- A Cenozoic Great Barrier Reef on Australia's North West shelf. Global and Planetary Change 184, 103048, p.
(Great Barrier Reef-sized barrier reef (~2000 km long) on NW Australia margin in M Miocene. Reef initiated in Oligocene (~34-28 Ma) and reached peak as prograding barrier reef in M Miocene (16-15 Ma). Backstepping in late Miocene (~10 Ma), formed series of isolated atolls and pinnacle reefs, some still surviving today (Rowley Shoals, Scott, Seringapatam and Ashmore Reefs). Initiation of reef growth related to Australia's N-ward drift into lower latitudes, combined with warm M Miocene climatic optimum conditions and possible changes in paleoceanography. High rates of subsidence probably caused ultimate demise of barrier reef system and widespread backstepping).

McKenzie, J.A. & P.J. Davies (1993)- Cenozoic evolution of carbonate platorms on the Northeastern Australian margin: synthesis of Leg 133 drilling results. In: J.A. McKenzie et al. (eds.) Proc. Ocean Drilling Program (ODP), Scientific Results 133, p. 763-770.
(online at: www-odp.tamu.edu/publications/133_SR/VOLUME/CHAPTERS/sr133_52.pdf)
(ODP wells off Great Barrier Reef and Queensland and Marion Plateaux. Carbonate sedimentation on Queensland Plateau began in M Eocene, when temperate waters transgressed across platform depositing bryozoan-rich sediments on drowned metasedimentary basement. Late Miocene platform demise)

McNeil, M., J.M. Webster, R. Beaman & T. Graham (2016)- New constraints on the spatial distribution and morphology of the *Halimeda* bioherms of the Great Barrier Reef, Australia. Coral Reefs 35, 4, p. 1343-1355.

(Halimeda bioherm formation and distribution controlled by interaction of outer-shelf geometry, regional and local currents, coupled with morphology and depth of continental slope submarine canyons determining delivery of cool, nutrient-rich water upwelling through inter-reef passages)

Meltzner, A.J., A.D. Switzer, B.P. Horton, E. Ashe, Q. Qiu, D.F. Hill, S.L. Bradley, R.E. Kopp et al. (2017)- Half-metre sea-level fluctuations on centennial timescales from mid-Holocene corals of Southeast Asia. Nature Communications 8, 14387, p. 1-16.
(online at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5309900/pdf/ncomms14387.pdf)
(Slabs of colonial coral from microatolls of Belitung Island on Sunda Shelf suggest sea level history between 6850-6500 yrs BP with two 0.6m fluctuations. Similar observations along S coast of China. Observed sea level fluctuations may reflect changes in dynamic sea surface height, local steric effects or eustatic changes)

Mihaljevic, M. (2014)- The Eocene-Miocene evolution of coral reefs from the Central Indo-Pacific. Ph.D. Thesis University of Queensland, p. 1-275.
(online at: https://espace.library.uq.edu.au/data/UQ_351615/s42513096_phd_submission.pdf)
(On evolution of coral reef habitats from M Eocene- E Miocene carbonate platforms; based on samples from Melinau and Subis Lst from Sarawak, and Cebu and Negros in the Philippines. With descriptions of 83 new fossil coral species and analysis of temporal changes in coral taxonomic and diversity)

Molengraaff, G.A.F. (1916)- Het probleem der koraaleilanden en de isostasie. Verslagen Koninklijke Akademie van Wetenschappen, Amsterdam, Wis- en Natuurkundige Afdeeling, 25, p. 215-231.
(Dutch version of Molengraaff 1917 paper below)

Molengraaff, G.A.F. (1917)- The coral reef problem and isostasy. Proc. Koninklijke Nederlandse Akademie van Wetenschappen, Amsterdam, 19, 4, p. 610-627.
(online at: https://dwc.knaw.nl/DL/publications/PU00012388.pdf)
(Discussion of reef growth theories of Darwin, Daly, etc., requiring sealevel rise or seafloor subsidence for significant reef development, and the possible causes of subsidence)

Molengraaff, G.A.F. (1930)- The coral reefs in the East Indian Archipelago, their distribution and mode of development. Proc. 4th Pacific Science Congress, Java 1929, IIA, p. 55-89.
(Early descriptions and distribution maps of coral reefs in Indonesia)

Molengraaff, G.A.F. (1930)- The coral reefs of the East Indian archipelago: their distribution and mode of development. II. The recent sediments in the seas of the East-Indian Archipelago with a short discussion on the condition of those seas in former geological periods. Proc. 4th Pacific Science Congress, Java 1929, 2B, p. 989-1021.

Moll, H. (1983)- Zonation and diversity of Scelactinia on reefs off S.W. Sulawesi, Indonesia. Ph.D.Thesis, Leiden University, p. 1-107. *(Unpublished)*

Moll, H. (1986)- The coral community structure on the reefs visited during the Snellius-II expedition in eastern Indonesia. Zoologische Mededelingen, Leiden, 60, p. 1-25.
(online at: http://repository.naturalis.nl/document/149624)

Montaggioni, L.F. (2005)- History of Indo-Pacific coral reef systems since the last glaciation: development patterns and controlling factors. Earth-Science Reviews 71, p. 1-75.
(online at: https://ftp.soest.hawaii.edu/coastal/Climate%20Articles/Montaggioni_EarthSciRev_2005.pdf)
(Overview of development of coral reefs in Indo-Pacific during last 23 ka. Seven framework and three detrital facies identified. Degree of reef development linked to coral community structure. Four reefal anatomy types, based on dominant depositional patterns: balanced aggrading/onlapping, unbalanced aggrading/downlapping, prograding and backstepping)

Moore, C.H. (2001)- Carbonate reservoirs- porosity evolution and diagenesis in a sequence stratigraphic framework. Developments in Sedimentology, Elsevier, Amsterdam, 55, p. 1-444.
(Review of carbonate deposition and diagenesis, including a case history of Malampaya gas field, NW of Palawan, Philippines)

Murphy, R.W. & I. Longley (2005)- Carbonates in Southeast Asia. Indonesian Petroleum Association (IPA) Newsletter, July 2005, p. 10-15.
(online at: https://www.ipa.or.id/assets/images/newsletter/IPA_Newsletter_07_2005_9.pdf)
(Widespread Miocene carbonates are important oil-gas reservoirs. Most economic carbonates of E-M Miocene age, below regional M Miocene shales section. All economic carbonate production in SE Asia is from secondary porosity)

Nayoan, G.A.S., Arpandi & M. Siregar (1981)- Tertiary carbonate reservoirs in Indonesia. In: Energy Resources of the Pacific Region, American Assoc. Petroleum Geol. (AAPG), Studies in Geology 12, p. 133-145.

Netherwood, R. (2002)- Oligo-Miocene carbonate reservoirs in Indonesia. Indonesian Petroleum Association (IPA) Newsletter, October 2002, p. 17-23.

Niermeyer, J.F. (1911)- Barriere-riffen en atollen in de Oost-Indische Archipel. Tijdschrift Koninklijk Nederlands Aardrijkskundig Genootschap, Ser. 2, 28, p. 877-894.
('Barrier reefs and atolls in the East Indies Archipelago'. Modern coral reefs common in Indonesia. Barrier reefs and atolls were believed to be rare, but prove to be more common on latest maritime maps)

Nontji, A. (2003)- Coral reefs of Indonesia: past, present and future. In: K. Moosa & S. Darsono (eds.) Proc. 9th International Coral Reefs Symposium, 1, p. 17-27.

Ongkosongo, O.S.R. (1988)- Guide Book Post Convention field trip Pulau Seribu. Indonesian Petroleum Association, 17th Annual Convention, Jakarta, p. 1-157.

Orme, G.R. (1977)- The Coral Sea Plateau- a major reef province. In: O.A. Jones & R. Endean (eds.) Biology and geology of coral reefs, 4, Academic Press, New York, p. 267-306.

Orme, G.R. (1985)- The sedimentological importance of *Halimeda* in the development of back-reef lithofacies, northern Great Barrier Reef (Australia). Proc. 5th International Coral Reef Symposium, Tahiti 5, p. 31-37.

Pandolfi, J.M., A.W. Tudhope, G. Burr, J. Chappell, E. Edinger, M. Frey et al. (2006)- Mass mortality following disturbance in Holocene coral reefs from Papua New Guinea. Geology (GSA) 34, 11, p. 949-952.
(Evidence for several episodes of coral mass mortality in uplifted E-M-Holocene reef terraces and reefs along Huon Peninsula. Most striking mortality event at 9100-9400 yr B.P., associated with volcanic ash horizon)

Park, R.K., P.D. Crevello & W. Hantoro (2010)- Equatorial carbonate depositional systems of Indonesia. In: W.A. Morgan, A.D. George et al. (eds.) Cenozoic carbonate systems of Australasia, Soc. Sedimentary Geology (SEPM), Special Publ. 95, p. 41-77.
(On processes and controls on tropical carbonate deposition in Indonesia)

Perrin, C. (2002)- Tertiary: the emergence of modern reef ecosystems. In: W. Kiessling et al. (eds.) Phanerozoic reef patterns, Soc. Sedimentary Geology (SEPM) Special Publ. 72, p. 587-621.
(Reefal buildups relatively scarce during Early Tertiary, but widespread from Late Oligocene onwards, with acme of reef expansion during Early-Middle Miocene)

Perrin, C. & W. Kiessling (2010)- Latitudinal trends in Cenozoic reef patterns and their relationship to climate. In: M. Mutti et al. (eds.) Carbonate systems during the Oligocene-Miocene climatic transition. Int. Association of Sedimentologists (IAS), Special Publ. 42, p. 17-34.

(Reef distribution patterns not cross-correlated with paleoclimate change. Global cooling trend from Eocene to Miocene is correlated with increase of reef carbonate production and latitudinal expansion of reef belt)

Petroconsultants (M. Longman principal author) (1993)- Southeast Asian carbonate reservoirs. 2 vols.
(Unpublished, major review study)

Phipps, C.V.G. & H.H. Roberts (1988)- Seismic characteristics and accretion history of *Halimeda* bioherms on Kalukalukuang Bank, eastern Java Sea (Indonesia). Coral Reefs 6, p. 149-159.
(Extensive areas of Halimeda bioherms on Kalukalukuang Bank (K-Bank), 50 km E of Sunda Shelf margin in E Java Sea. K-Bank isolated limestone platform, with top sloping from ~20 m water depth in N to ~100 m in S. K-Bank relatively flat top with marginal banks of suspected Pleistocene origin as interpreted from seismic)

Phipps, C.V.G., P.J. Davies and D. Hopley, 1985)- The morphology of *Halimeda* banks behind the Great Barrier Reef East of Cooktown, QLD. In: M. Harmelin Vivien & B. Salvat (eds.) Proc. Fifth International Coral Reef Symposium, Tahiti 1985, 5, Miscellaneous Papers, p. 27-30.
(Halimeda banks of Great Barrier reef consist of ridges up to 15m high. Two species of Halimeda. Reefs grown only in last 8000 yrs. Positions suggest association with ingressions of nutrient-rich water into lagoonal area))

Pierson, B., A. Chalabi & A.A. Ashaari (2010)- Modern analogues to heterogeneous Miocene carbonate reservoirs of the South China Sea. First Break 28, p. 91-96.
(Studies of three Recent isolated carbonate platforms in Celebes Sea, E of Sabah, illustrate complexity of facies distribution. May be analogs for Luconia Miocene carbonate platforms)

Pigram, C.J. (1993)- Carbonate platform growth, demise and sea level record: Marion Plateau, Northeast Australia. Ph.D. Thesis, Australian National University, Canberra, p. 1-322.
(online at: https://openresearch-repository.anu.edu.au/handle/1885/109304)
(Marion Plateau is most southerly of marginal plateaus offshore NE Australia, in area beyond Great Barrier Reef and is extension of Queensland continental shelf in water depths 100-500m. Plateau summit remained exposed through Paleogene, during which it was planated to form gently dipping 200 km wide plateau. Capped by Late Oligocene- Miocene carbonate buildups)

Pigram, C.J., P.J. Davies & G.C.H. Chaproniere (1993)- Cement stratigraphy and the demise of the Early-Middle Miocene carbonate platform on the Marion Plateau. In: J.A. MacKenzie et al. (eds.) Proc. Ocean Drilling Program (ODP), Scientific Results 133, p. 499-512.
(online at: www-odp.tamu.edu/Publications/133_SR/VOLUME/CHAPTERS/sr133_34.pdf)
(Marion Plateau off NE Australia has several shallow marine carbonate platforms, most of which drowned and now in >400 m of water. Oldest drowned platform of E-M Miocene age with initial shallow-marine phreatic phase of cementation, followed by meteoric diagenesis, followed by dolomitization and/or a deep marine cementation. Demise of platform caused by exposure for ~7-10 My sea level drop in M-L Miocene (N10-N17))

Polonia, A.R.M., D.F.R. Cleary, N.J. de Voogd, W. Renema, B.W. Hoeksema, A. Martins & N.C.M. Gomes (2015)- Habitat and water quality variables as predictors of community composition in an Indonesian coral reef: a multi-taxon study in the Spermonde Archipelago. Science of the Total Environment 537, p. 139-151.

Pomar, L. & C.G.St.C. Kendall (2008)- Architecture of carbonate platforms: a response to hydrodynamics and evolving ecology. In: J. Lukasik & A. Simo (eds.) Controls on carbonate platform and reef development, Soc. Sedimentary Geology (SEPM) Special Publ. 89, p. 187-216.

Posamentier, H.W. & S.L. Bachtel (2010)- Seismic geomorphology of a Tertiary-aged isolated carbonate platform system, Browse Basin, Northwest Shelf of Australia: the spatial and temporal evolution of carbonate platform environments- the Lower Section-Part I. In: L.J. Wood et al. (eds.) Seismic imaging of depositional and geomorphic systems, Proc. 30th Annual Perkins Research Conference, Gulf Coast Section SEPM, Houston, p. 113-114.

Posamentier, H.W. & S.L. Bachtel & T.P. Gerber (2010)- Seismic geomorphology of a Tertiary-aged isolated carbonate platform system, Browse Basin, Northwest Shelf of Australia- Part II. In: L.J. Wood et al. (eds.) Seismic imaging of depositional and geomorphic systems, Proc. 30th Annual Perkins Research Conference, Gulf Coast Section SEPM, Houston, p. 136-157.

Premonowati (2010)- Metode pendiskripsian batugamping untuk hydrocarbon reservoar characterization dalam pemodelan geologi. Proc. 39th Annual Conv. Indonesian Association Geologists (IAGI), Lombok, PIT-IAGI-2010-314, p. 1-11.
(online at: https://www.iagi.or.id/web/digital/12/2010_IAGI_Lombok_Metode- Pendiskripsian-Batugamping.pdf)
(General paper discussing limestone description characteristics for reservoir characterization)

Pulunggono, A. (1976)- Tertiary carbonates distribution and oil potential in Indonesia. Proc. Carbonate Seminar Jakarta 1976, Indonesian Petroleum Association (IPA), Special Volume, p. 6-13.

Purdy, E.G. & D. Waltham (1999)- Reservoir implications of modern karst topography. American Assoc. Petroleum Geol. (AAPG) Bull. 83, 11, p. 1774-1794.
(Tropical karst landscapes exhibit mainly positive relief features, temperate karst areas more negative relief features (i.e., sink holes, dolines, etc.), but not observed in subsurface on seismic sections. Topographic profiles over karst relief features of China, Java (Gunung Sewu) used to construct synthetic seismic sections)

Rankey, E.C. (2023)- Deep-time perspectives on Miocene isolated carbonate platforms of Southeast Asia. In: E.C. Rankey & M.C. Poppelreiter (eds.) Cenozoic isolated carbonate platforms- Focus Southeast Asia, Society for Sedimentary Geology (SEPM) Special Publ. 114, p. 1-27.
(Review of >850 Phanerozoic isolated carbonate platforms, for comparison with C Luconia Miocene platforms)

Rankey, E.C., G. Warrlich, E. Adams, K.P. Jakobsen & J. Teoh (2023)- Modern carbonate systems of Southeast Asia: developing insights for understanding subsurface carbonate reservoirs in Southeast Asia. In: E.C. Rankey & M.C. Poppelreiter (eds.) Cenozoic isolated carbonate platforms- Focus Southeast Asia, Society for Sedimentary Geology (SEPM) Special Publ. 114, p. 1-36.
(Describe oceanic settings of present-day Southeast Asia oceans and develop understanding of older isolated platforms, especially Miocene systems of Luconia)

Renema, W., J.M. Pandolfi, W. Kiessling, F.R. Bossellini, J.S. Klaus, C. Korpanty, B.R. Rosen et al. (2016)- Are coral reefs victims of their own past success? Science Advances 2, 4, p. 1-6.
(online at: https://www.science.org/doi/epdf/10.1126/sciadv.1500850)

Ringeltaube, P. & A. Harvey (2000)- Non-geniculate coralline algae (Corallinales, Rhodophyta) on Heron Reef, Great Barrier Reef (Australia). Botanica Marina 43, p. 431-454.
(Coralline algae from Heron Island lagoon and shallow reef margin/slope, incl. Lithophyllum spp., Hydrolithon spp., Neogoniolithon, Spongites, Lithothamnion, Mastophora, etc. Hydrolithon onkodes abundant on reef flat towards rim)

Roberts, H.H. & C.V. Phipps (1988)- Proposed oceanographic controls on modem Indonesian reefs: a turn-off/turn-on mechanism in a monsoonal setting. In: J.H. Choat et al. (eds.) Proc. 6th International Coral Reef Symposium, Townsville 1998, 3, p. 529-534.
(In E Java Sea mutually exclusive occurrences of coral reefs and Halimeda bioherms: coral reefs in depths <15m, extensive areas of 20-50m thick Halimeda bioherms between 20-100m. Unusual success of Halimeda at expense of reef-building corals appears related to nutrient overloading as modulated by monsoon cycle. Strong E-to-W surface flow during E monsoon induces upwelling along western platform margins. Deformation of shallow thermocline where nutrients concentrate (50-100m) brings this deeper Pacific throughflow water to platform margins and top)

Saller, A.H. & R.B. Koepnick (1990)- Eocene to Early Miocene growth of Enewetak Atoll; insight from strontium-isotope data. Geological Society of America (GSA) Bull. 102, 3, p. 381-390.
(online at: https://www.researchgate.net/profile/Arthur-Saller/publication/249526253_Eocene_to_early_Miocene_growth_of_Enewetak_Atoll_Insight_from_strontium-isotope_data Etc.)
(Margin of Eniwetok atoll contains1260-1405m of Late Eocene- E Miocene carbonates above volcanic basement. New Sr isotope data from E1 and F1 wells (original larger foraminifera analyses paper by W.S. Cole (1957))

Santoso, W.D., Y. Zaim & Y. Rizal (2017)- Carbonate biofacies and paleoecology analysis based on *Acropora* coral in Ujunggenteng area, West Java Province, Indonesia. J. RISET Geologi dan Pertambangan (LIPI) 27, 2, p. 179-188.
(online at: http://jrisetgeotam.com/index.php/jrisgeotam/article/view/477/pdf)
(Limestone at Ujung Genteng beach, SW Java, with three Acropora coral associations, tied to 0-13m paleobathymetry. (Quaternary age?))

Santoso, W.D., Y. Zaim & Y. Rizal (2018)- Paleontology of *Acropora* corals and standard facies belt from Ujunggenteng area, West Java. J. RISET Geologi dan Pertambangan (LIPI) 28, 2, p. 129-140.
(online at: http://jrisetgeotam.com/index.php/jrisgeotam/article/view/799)
(4 species of branching coral genus Acropora in Quaternary limestones exposed along Ujunggenteng beach)

Saqab, M.M. & J. Bourget (2015)- Controls on the distribution and growth of isolated carbonate build-ups in the Timor Sea (NW Australia) during the Quaternary. Marine and Petroleum Geology 62, p. 123-143.
(Quaternary isolated carbonate build-ups common on NW Australia shelf/ Bonaparte Basin: 1-30 km wide, in clusters of ~150 build-ups, 2-85 km from edge of 650 km-wide continental shelf. Mainly 'Halimeda bioherms'. Distribution of buildups impacted by fault activity, starting in latest Miocene- E Pliocene (initial collision of Australian Plate with Banda Arc, increasing and peaking in E Pleistocene), causing flexural reactivation of structural highs and lows along shelf-margin. Seismic evidence of moat channels and drift deposits suggest contour current activity intensified in late E Pleistocene (~1 Ma). Despite good conditions, buildups did not form until M Pleistocene (~0.58- 0.8 Ma), corresponding to onset of major sea level fluctuations)

Sartorio, D. & S. Venturini (1988)- Southern Tethys biofacies. AGIP, San Donato Milanese, p. 1-235.
(Atlas of excellent photomicrographs of Cambrian- Pliocene carbonate thin sections, mainly from Mediterranean region)

Scaps, P. & F. Runtukahu (2008)- Assessment of the coral reefs of the Luwuk Peninsula, Central Sulawesi, Indonesia. Bull. Societe Zoologique France 133, p. 341-355.
(Recent coral reefs off the East Arm of Sulawesi)

Scheibner, C. & R.P. Speijer (2008)- Late Paleocene- Early Eocene Tethyan carbonate platform evolution- a response to long- and short-term paleoclimatic change. Earth-Science Reviews 90, p. 71-102.
(Three stages in Late Paleocene- E Eocene Tethys carbonate platforms: (1) late Paleocene: coralgal-dominated at low-mid paleolatitudes; (2) latest Paleocene: coralgal reefs dominant at middle paleolatitudes and larger foraminifera-dominated (Miscellanea, Ranikothalia, Assilina) at low paleolatitudes; (3) E Eocene larger foraminifera-dominated (Alveolina, Orbitolites, Nummulites) platforms at low-middle paleolatitudes. Onset of larger foraminifera-dominated platform correlates with Paleocene/Eocene Thermal Maximum. Decline of coralgal reefs in low latitudes related to warming, with sea-surface temperatures in tropics beyond maximum temperature range of corals)

Scheibner, C., R.P. Speijer & A.M. Marzouk (2005)- Turnover of larger foraminifera during the Paleocene-Eocene Thermal Maximum and paleoclimatic control on the evolution of platform ecosystems. Geology (GSA) 33, 6, p. 493-496.
(online at: https://lirias.kuleuven.be/retrieve/121047)
(Larger-Foraminifera Turnover (LFT) at Paleocene-Eocene transition involves rapid increase in species and shell size. LFT coincides with Paleocene-Eocene Thermal Maximum (PETM). Because of vulnerability of corals

to high surface-water temperatures, global warming may have favored larger foraminifera at expense of corals as main carbonate-producing component on carbonate platforms at lower latitudes)

Scrutton, M.E. (1976)- Aspects of carbonate sedimentation in Indonesia. Proc. 5th Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, p. 179-193.

Scrutton, M.E. (1978)- Modern reefs in the West Java Sea. Proc. IPA Carbonate Seminar, Jakarta 1976, Indonesian Petroleum Association, Special Vol., p. 14-41.
(Overview of reefs and bottom sediments composition of Pulau Seribu, Java Sea, NW of Jakarta)

Scrutton, M. (1979)- Modern reefs in the West Java Sea. Proc. SE Asia Petroleum Exploration Society (SEAPEX) Conference. 4, Singapore, p. 22-40.
(Study of carbonate sediment composition of Pulau Seribu group of coral reefs, Java Sea)

Sluiter, C.P. (1890)- Uber die Entstehung der Korallenriffe in der Java See und Branntweinsbai, und uber neue Korallenbildung bei Krakatau. Biologisches Centralblatt 9, 24, p. 737-753.
('On the origin of the coral reefs in the Java Sea and Brandewijns Bay (near Padang, W Sumatra) and on new coral growth near Krakatoa'. On initiation of new coral growth in Bay of Jakarta (away from muddy bottoms and usually first by solitary corals Madrepora, Porites, etc., followed by massive corals Astraea, etc.) and growth of modern reefs. Same as Sluiter (1890) below)

Sluiter, C.P. (1890)- Einiges uber die Entstehung der Korallenriffe in der Java Zee und Branntweinsbai, und uber neue Korallenbildung bei Krakatau. Natuurkundig Tijdschrift voor Nederlandsch-Indie 49, 2, p. 360-380.
(online at: http://62.41.28.253/cgi-bin/...)
('On the origin of the coral reefs in the Java Sea and Brandewijns Bay (near Padang, W Sumatra) and on new coral growth near Krakatoa')

Solihuddin, T. (2017)- Atoll reef geomorphology of Sagori Island, SE Sulawesi: a reconnaissance study. Indonesian J. on Geoscience (IJOG) 4, 3, p. 181-191.
(online at: https://ijog.geologi.esdm.go.id/index.php/IJOG/article/view/386/247)

Spencer, T. & M.D. Spalding (2005)- Coral reefs of Southeast Asia: controls, patterns and human impacts. In: A. Gupta (ed.) The physical geography of Southeast Asia, Oxford University Press, p. 402-427.
(Indonesia with its 17,500 islands contains 32% of world's shallow coral reefs)

Starger, C.J., P.H. Barber, Ambariyanto & A.C. Baker (2010)- The recovery of coral genetic diversity in the Sunda Strait following the 1883 eruption of Krakatau. Coral Reefs 29, 3, p. 547-565.
(Genetic diversity has largely recovered on reefs decimated by eruption of Krakatau in 1883. Recolonization occurred mainly from Pulau Seribu, but also larval input from other regions. Recovery of genetic diversity in coral reef animals can occur on order of decades and centuries rather than millennia)

Sun, S.Q. & M. Esteban (1994)- Paleoclimatic controls on sedimentation, diagenesis and reservoir quality: lessons from Miocene carbonates. American Assoc. Petroleum Geol. (AAPG) Bull. 74, 4, p. 519-543.
(Reservoir quality of Miocene carbonates primarily controlled by prevailing paleoclimate. Two end members: (1) humid, oceanic tropical-subtropical settings (e.g. Miocene of SE Asia). Warming trend and rising sea level allowed thick coral reefs and skeletal banks to develop. Typically several 3rd-order cycles, separated by discontinuities in platform growth with subaerial exposure, with porosity development associated with meteoric leaching and karstification. Basal transgressive carbonates mostly tight; (2) arid, land-locked temperate-subtropical settings with elevated salinities and relatively low temperature restricting growth of buildups. Mainly thin, narrow fringing coral reefs with small lagoons in rhodalgal ramps, with minimal meteoric dissolution during subaerial exposure. Evaporitic lagoons cause of pervasive dolomitization, leaching and generation of moldic, vuggy and intercrystalline porosity. Often with anhydrite cement)

Tanaka, Y. (2016)- Coral diversity and coral reef environment in Brunei Darussalam. Scientia Bruneiana, Special Issue, p. 13-17.
(online at: https://scibru.fos.ubd.edu.bn/index.php/scibru/article/view/28/15)
(Coral reefs 4-30 km off Brunei with 400 species of scleractinian corals, close to highest diversity in S China Sea)

Teichert, C. & R.W. Fairbridge (1948)- Some coral reefs of the Sahul Shelf. Geographical Review 38, 2, p. 222-249.

Tomascik, T., A.J. Mah, A. Nontiji & M. Moosa (1997)- Geological history of reefs. In: The ecology of the Indonesian Seas, Part I, Chapter 5, The ecology of Indonesia 7, Periplus Ed., Singapore, p. 145-206.

Tomascik, T., A.J. Mah, A. Nontiji & M. Moosa (1997)- Fringing reefs, patch reefs, barrier reefs, atolls, coral cays. In: The ecology of the Indonesian Seas II, The ecology of Indonesia series 7, Chapters 13-17, Periplus Ed., Singapore, p. 643-827.

Tomascik, T., Suharsono & A.J. Mah (1994)- Case histories: a historical perspective of the natural and anthropogenic impacts in the Indonesian Archipelago with a focus on the Kepulauan Seribu, Java Sea. Proc. Colloquium Global aspects of coral reefs: health, hazard and history, Miami, p. 304-310.-*(online at: www.researchgate.net/publication/284877475_Case_histories_a_historical_perspective_of_the_natural_and_anthropogenic_impacts_in_the_Indonesian_Archipelago_with_a_focus_on_the_Kepulauan_Seribu_ Etc.)*
(Discussion of environmental degradation in Jakarta Bay and Kepulauan Seribu (chain of coral cays in Java Sea, ~40 km from Jakarta). Inverse relationship between water transparency and coral reef health)

Tomascik, T., R. van Woesik & A.J. Mah (1996)- Rapid colonisation of a recent lava flow following a volcanic eruption, Banda Islands, Indonesia. Coral Reefs 15, p. 169-175.
(online at: https://www.researchgate.net/publication/225976451_Rapid_coral_colonization_of_a_recent_lava_flow_following_a_volcanic_eruption_Banda_Islands_Indonesia)
(Five years after the 1988 eruption of Gunung Api volcano, Banda Islands, lava flows supported diverse coral community (124 species) with high coral cover and with some colonies measuring over 90 cm in diameter)

Tsuji, Y. (1993)- Tide influenced high energy environments and rhodolith-associated carbonate deposition on the outer shelf and slope off the Miyako Islands, southern Ryukyu Island Arc, Japan. Marine Geology 113, p. 255-271.

Twidale, C.R. (2006)- Origin and development of Karstinselberge, with particular reference to some South East Asian evidence. Bull. Geological Society Malaysia 49, p. 145-155.
(online at: https://gsm.org.my/articles/702001-100554/)
(Discussion of formation of cone karst and tower karst, mainly in Malaysia)

Umbgrove, J.H.F. (1928)- Een eeuw theorieen over het ontstaan van koraalriffen. Natuurkundig Tijdschrift voor Nederlandsch-Indie 88, p. 141-183.
('A century of theories on the origin of coral reefs')

Umbgrove, J.H.F. (1928)- De koraalriffen in de Baai van Batavia. Dienst Mijnbouw Nederlandsch-Indie, Bandung, Wetenschappelijke Mededeelingen 7, p. 1-66.
('The coral reefs in the Bay of Jakarta'. 63 recent species. Reef islands started on muddy bottom, sank into substrate after growth)

Umbgrove, J.H.F. (1929)- De koraalriffen der Duizend Eilanden (Java-zee). Wetenschappelijke Mededeelingen, Dienst Mijnbouw Nederlandsch-Indie, Bandung, 12, p. 3-47.
(online at: https://www.delpher.nl/nl/boeken/view?identifier=MMKB24:079039000:00001)
('The coral reefs of the Thousand Islands (Java Sea)'. Description of the so-called Thousand Islands (Pulau Seribu), a group of 80 coral islands (patch reefs) in the W Java Sea, just outside Jakarta Bay. Many islands

elongated in E-W direction, reflecting preferential growth onwindward side during East Monsoon. (in Dutch, with extended English summary. Reefs thickness ~90m or more (reflecting growth during Holocene sealevel rise)The N-S arrangement of the whole island group reflects an underlying pre-Holocene ridge)

Umbgrove, J.H.F. (1930)- The end of Sluiter's coral reef at Krakatoa. Leidsche Geologische Mededelingen 3, p. 261-264.
(online at: www.repository.naturalis.nl/document/549489)
(Rapid re-colonization of Krakatoa remnants (NW Rakata) by corals (mainly branching types) after 1883 eruption, as observed by Sluiter (1890). Forty years later covered by pumice deposits eroded from exposed Rakata walls)

Umbgrove, J.H.F. (1930)- De koraalriffen van den Spermonde Archipel (Zuid-Celebes). Leidsche Geologische Mededelingen 3, 5, p. 227-247.
(online at: http://www.repository.naturalis.nl/document/549271)
('The coral reefs of the Spermonde Archipelago, S Sulawesi'. Early survey of modern reefs off SW tip of Sulawesi. Adjacent coastal plain is bordered by Maros Mountains, composed of Late Eocene and Miocene limestones)

Umbgrove, J.H.F. (1930)- The influence of the monsoons on the geomorphology of coral islands. Proc. 4th Pacific Science Congress, Java 1929, IIA, p. 49-64.
(Character of coral reefs strongly influenced by prevailing winds. Indies Archipelago in monsoon zone, where winds change with seasons)

Umbgrove, J.H.F. (1930)- De tegenwoordige gedaante der koraal-rif problemen. De Ingenieur 1930, 27, M. Mijnbouw, p. M11-M15.
(online at: https://resolver.kb.nl/resolve?urn=dts:2959095:mpeg21:pdf)
('The current status of the coral reef problems'. Inaugural lecture as Professor of Geology at the Technische Hogeschool Delft, in June 1930)

Umbgrove, J.H.F. (1931)- De koraalriffen van Emmahaven (W Sumatra). Leidsche Geologische Mededelingen 4, p. 9-24.
(online at: www.repository.naturalis.nl/document/549644)
('The coral reefs of Port Emma, West Sumatra'. On modern coral reefs in bay near Padang)

Umbgrove, J.H.F. (1939)- De atollen en barriere-riffen der Togian eilanden. Leidsche Geologische Mededelingen 11, 1, p. 139-187.
(online at: https://repository.naturalis.nl/pub/505837/LGM1939011001004.pdf)
('The atolls and barrier reefs of the Togian Islands'. Study of modern atolls and reefs in Tomini Gulf, NE Sulawesi, with reconnaissance geology observations on Togian Islands. Oldest rocks are sediments, intruded by young volcanics (but no recent activity). Raised reef terraces younger than Tf/Miocene)

Umbgrove, J.H.F. (1939)- Madreporaria from the Bay of Batavia. Zoologische Mededelingen 22, 1, p. 1-64.
(online at: www.repository.naturalis.nl/document/149596)
(Study of corals in the Bay of Jakarta)

Umbgrove, J.H.F. (1939)- Madreporia from the Togian reefs (Gulf of Tomini, North Celebes). Zoologische Mededelingen 22, 10, p. 265-308.
(online at: https://repository.naturalis.nl/pub/318138/ZM1940022010.pdf)
(Descriptions of modern corals from steep barrier reefs, atolls and fringing reefs of the Togian Islands, E Sulawesi. In setting rel. sheltered from monsoons, therefore lacking shingle ramparts and sand cays)

Umbgrove, J.H.F. (1946)- Evolution of reef corals in East Indies since Miocene time. American Assoc. Petroleum Geol. (AAPG) Bull. 30, p. 23-31.
(The Lyellian method of percentage-of-living-species deemed useful for stratigraphic dating and correlation)

Umbgrove, J.H.F. (1947)- Coral reefs of the East Indies. Geological Society of America (GSA) Bull. 58, 8, p. 729-778.
(Review of investigations on coral reefs in Indonesia in 15 years before WWII. Every atoll and barrier reef studied shows evidence of subsidence. Extreme thickness of some reefs, as demonstrated by their steep submarine slopes, cannot be explained by glacial control only. Prevailing wind and wave action are important influence on upper structure of reefs. Additional examples of currents as factors of morphological importance)

Umbgrove, J.H.F. & J. Verweij (1929)- The coral reefs in the Bay of Batavia. Proc. 4th Pacific Science Congress, Java 1929, Excursion Guide A2, p. 5-30.
(online at: https://nla.gov.au/nla.obj-3123127124/view?partId=nla.obj-3123129921)

Utami, D.A. & A.R. Hakim (2018)- Carbonate sedimentology of Seribu Islands patch reef complex: a literature review. Proc. Global Colloquium on GeoSciences and Engineering, Bandung 2017, IOP Conference Series: Earth and Environmental Science 118, 012013, p. 1-6.
(online at: http://iopscience.iop.org/article/10.1088/1755-1315/118/1/012013/pdf)
(Kepulauan Seribu archipelago many atoll-like islands with reef belts exposed to bidirectional monsoon winds. Four main facies; coral grainstone, coral packstone/grainstone, coral-mollusc packstone and mollusc wackestone. Etc.)

Utami, D.A., L. Reuning & S.Y. Cahyarini (2018)- Satellite- and field-based facies mapping of isolated carbonate platforms from the Kepulauan Seribu Complex, Indonesia. The Depositional Record (SEPM) 4, 2, p. 255-273.
(online at: https://onlinelibrary.wiley.com/doi/epdf/10.1002/dep2.47)

Van der Horst, C.J. (1921)- Madreporaria Fungida. Siboga Expeditie Monograph 16b, Brill, Leiden, p. 1-46.
(First of series of papers on Recent corals of Indonesia, collected during Siboga Expedition)

Van der Horst, C.J. (1921)- Madreporaria of the Siboga Expedition, Part 2. Madreporaria Fungida. Siboga Expeditie Monograph 16b, Brill, Leiden, p. 53-98.
(Second of series of monographs on Recent corals of Indonesia, collected during Siboga Expedition (Part 1 by Alcock (1902), part 4 by H. Boschma)

Van der Horst, C.J. (1922)- The Madreporaria of the Siboga Expedition. Part 3: Eupsammidae. Siboga Expeditie Monograph 16c, Brill, Leiden, p. 99-127.
(online at: https://ia600404.us.archive.org/25/items/sibogaexpeditie92sibo/sibogaexpeditie92sibo.pdf)
(Third of series of monographs on Recent corals of Indonesia, collected during Siboga Expedition

Van der Meij, S.E.T., Suharsono & B.W. Hoeksema (2010)- Long-term changes in coral assemblages under natural and anthropogenic stress in Jakarta Bay (1920-2005). Marine Pollution Bull. 60, 9, p. 1442-1454
(Coral reefs in Jakarta Bay have been under long-term natural and anthropogenic stress. Coral species diversity and composition of reefs changed considerably between 1920 and 2005. About half number of species recorded in 1920 was found again in 2005)

Veron, J., M. Stafford-Smith, L. DeVantier & E. Turak (2015)- Overview of distribution patterns of zooxanthellate Scleractinia. Frontiers in Marine Science 1, 81, p. 1-19.
(online at: http://journal.frontiersin.org/article/10.3389/fmars.2014.00081/full)
(Global study of present-day geographic distributions of corals. Birds Head- Sulu Sea region is global center of peak coral diversity))

Verstappen, H.Th. (1953)- Oude en nieuwe onderzoekingen over de koraaleilanden in de baai van Djakarta. Tijdschrift Koninklijk Nederlands Aardrijkskundig Genootschap 70, 4, p. 472-478.
('Early and recent investigations on the coral islands in the Bay of Jakarta'. Results of 1950-1951 investigations compared with studies by Sluiter 1890 and Umbgrove 1928. Coral islands only in W part of bay. Islands

probably older than 3000 years, as suggested by Umbgrove, and controlled by underlying structure. Shape and growth patterns of island largely controlled by dominant wind patterns)

Verstappen, H.Th. (1954)- The influence of climatic changes on the formation of coral islands. American Journal of Science 252, 7, p. 428-435.
(Comparison of modern small patch reefs in Jakarta Bay from 1875, 1927, 1935 and 1950. Shingle ramparts of coarse material originate on weather side of reefs and varied through time: in 1875 mainly on NW sides of islands (period of dominant W-monsoon), in 1927 in N, NE and E (period of dominant E-monsoon), in 1939 and 1950 most on W sides (period of dominant W-monsoon))

Veron, J.E.N. & R. Kelley (1988)- Species stability in reef corals of Papua New Guinea and the Indo Pacific. Memoir Assoc. Australasian Palaeontologists (AAP) 6, p. 1-69.
(Pliocene coral fauna from PNG with 85 species, of which 87% still extant)

Verweij, J. (1930)- Depth of coral reefs and penetration of light. With notes on oxygen consumption of corals. Proc. 4th Pacific Science Congress, Java 1929, 2A, p. 277-299.
(Oxygen content of water in lagoon of one of islands in Bay of Jakarta rises during day and falls at night, suggesting production of oxygen by algae during day and significant consumption by reef at night. Lower depth limit of reef corals controlled by depth of light penetration (corals depend on zooxanthellid algae for food), This is usually around 40m, but may be reduced in areas of clay-silt sediment supply, like Bay of Jakarta)

Verweij, J. (1930)- Coral reef studies. Treubia 12, p. 305-366.
(online at: http://e-journal.biologi.lipi.go.id/index.php/treubia/article/view/1894/1780)
(Mainly zoological studies of Indonesian coral reefs)

Verweij, J. (1931)- Coral reef studies II. The depth of coral reefs in relation to their oxygen consumption and the penetration of light in the water. Treubia 13, 2, p. 169-198.
(online at: http://e-journal.biologi.lipi.go.id/index.php/treubia/article/view/1933/1816)
(Observations on Onrust island coral reef in W Bay of Batavia. Close correlation between amount of suspended silt (light penetration) and lower depth limit of growth of reef corals)

Verweij, J. (1931)- Coral reef studies III. Geomorphological notes on the coral reefs of Batavia Bay. Treubia 13, 2, p. 199-215.
(online at: e-journal.biologi.lipi.go.id/index.php/treubia/article/download/1934/1817)
(Observation on coral islands Dapur, Damar Besar (edam) and Pulau Ayer (Hoorn) in Bay of Jakarta, after initial work of Umbgrove. Not much coral growth below ~10-15m, due to silt content of bay water)

Waheed, Z. & B.W. Hoeksema (2013)- A tale of two winds: species richness patterns of reef corals around the Semporna Peninsula, Malaysia. Marine Biodiversity 43, p. 37-51.
(online at: https://link.springer.com/content/pdf/10.1007/s12526-012-0130-7.pdf)
(Highest concentration of Malaysian (N Borneo) coral reefs is in coastal area of Semporna, E Sabah, which is located just within the boundaries of the 'Coral Triangle' of maximum marine species diversity. Five main reef types. Increasing coral diversity from exposed barrier reef to more sheltered nearshore reefs)

Waheed, Z., H.G.J. van Mil, M.A.S. Hussein, R. Jumin, B.G. Ahad & B.W. Hoeksema (2015)- Coral reefs at the northernmost tip of Borneo: an assessment of scleractinian species richness patterns and benthic reef assemblages. PLoS One 10, 12, e0146006, p. 1-25.
(online at: https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0146006)
(Coral reefs around Kudat and Bengkoka Peninsulas of N Sabah)

Wallace, C.C. (1997)- The Indo-Pacific center of coral diversity re-examined at species level. Proc. 8th International Coral Reef Symposium, Panama, 1, p. 365-370.
(On distribution pattern of Acropora coral species in Indonesia)

Wallace, C.C. (1999)- The Togian Islands: coral reefs with a unique coral fauna and an hypothesized Tethys Sea signature. Coral Reefs 18, p. 162. *(Abstract only?)*
(Acropora coral fauna of Togian Islands, N Sulawesi, high diversity and includes 'relict Tethys Sea' elements (conclusion re-assessed in Wallace 2001: more likely remnant Pacific fauna))

Wallace, C.C. (2001)- Wallace's line and marine organisms: the distribution of staghorn corals (*Acropora*) in Indonesia. In: I. Metcalfe (ed.) Faunal and floral migrations and evolution in SE Asia-Australasia, Balkema, p. 168-178.
(online at: https://www.researchgate.net/publication/274412576_Wallace_C_C_2001_Wallace's_line_and_marine_organisms_the_distribution_of_staghorn_corals_Acropora_in_Indonesia)
(Distribution patterns of 89 species of Acropora staghorn coral, which has highest diversity in Wallacea region (= E Indonesia) (but is not center of origin). In Indonesian Archipelago overlap of Indian Ocean species (diminishing E-ward) and Pacific Ocean species (diminishing W-wards), with stronger Pacific influence possibly due to access of larvae through the Indonesian Throughflow currents)

Wallace, C.C., G. Paulay, B.W. Hoeksema, D.R. Bellwood, P.A. Hutchings, P.H. Barber et al. (2000)- Nature and origins of unique high diversity reef faunas in the Bay of Tomini, Central Sulawesi: The ultimate "center of diversity"? Proc. 9th International Coral Reef Symposium, Bali 2000, 1, p. 185-192.
(online at: https://www.academia.edu/2937380/Nature_and_origins_of_unique_high_diversity_reef_faunas_in_the_Bay_of_Tomini_Central_Sulawesi_The_ultimate_centre_of_diversity)
(Togian Islands support reef fauna with strong affinities to West Equatorial Pacific, also links with Sulawesi. Islands. Represent lagoonal refugia from Pleistocene lowlands. Little or no influence from Indian Ocean)

Wallace, C.C. & J. Wolstenholme (1998)- Revision of the coral genus *Acropora* (Scleractinia: Astrocoeniina: Acroporidae) in Indonesia. Zoological J. Linnean Society 123, p. 199-384.
(online at: https://pmc.ncbi.nlm.nih.gov/articles/PMC7165868/pdf/ZOJ-123-199.pdf)
(Review of 83 species of coral genus Acropora is reviewed from Indonesia, based on collections from 131 sites in 1993-1996. Species of Acropora in Indonesian waters include (1) five known only from Indian Ocean and Indonesia, (2) seven from Pacific Ocean, South China Sea and Indonesia, (3) 10 species apparently endemic to Indonesia, and (4) widespread Indo-Pacific species)

Watanabe, T., M.K. Gagan, T. Correge, W.S. Hantoro, H. Scott-Gagan, J. Cowley, G.E. Mortimer & M.T. McCulloch (2002)- Palaeoclimate reconstruction using *Diploastrea* and *Porites* corals from Alor in Eastern Indonesia. Proc. 31st Annual Conv. Indonesian Association Geologists (IAGI), Surabaya, 2, p. 645. *(Abstract only?)*
(Alor in Banda Sea is in core of Indo-Pacific warm Pool. 18O isotopes of coral growth stages used to monitor inter-annual climate changes. El Nino events in last 30 years clearly reflected by increased 18O)

Webster, J.M., J.C. Braga, D.A. Clague, C. Gallup, J.R. Hein, D.C. Potts, W. Renema, R. Riding et al. (2009)- Coral reef evolution on rapidly subsiding margins. Global and Planetary Change 66, p. 129-148.
(online at: https://robertriding.com/pdf/websteretal2009_1.pdf)
(Series of submerged coral reefs in Huon Gulf (PNG) and around Hawaii. Rapid subsidence (2-6 m/ka over last 500 ka), combined with eustatic sea-level changes, responsible for repeated drowning and backstepping of coral reefs. Reef drowning characterized by distinct biological and sedimentary sequence. In short term, rate and amplitude of eustatic sea-level changes control initiation, growth, drowning or sub-aerial exposure, subsequent reinitiation, and final drowning. Over longer time scales (>100-500 ka) tectonic subsidence and basement substrate morphology influence reef morphology and backstepping geometries)

Webster, J.M., L. Wallace, E. Silver, B. Applegate, D. Potts, J.C. Braga & C. Gallup (2004)- Drowned carbonate platforms in the Huon Gulf, Papua New Guinea. Geochem. Geophysics Geosystems 5, 11, Q11008, p. 1-31.
(online at: http://onlinelibrary.wiley.com/doi/10.1029/2004GC000726/pdf)
(W Huon Gulf actively subsiding foreland basin with 14 drowned carbonate platforms and many pinnacles/ banks, increasing in age (~20-450 kyr) and depth (0.1-2.5 km) NE to Ramu- Markham Trench. Superimposed

on downward flexing of platforms toward trench is tilting of deep platforms to NW and shallow platforms to SE. This may reflect encroaching thrust load from NW (Finisterre Range). Over shorter time scales (~100 kyr) eustatic sea level changes critical in controlling initiation, growth, drowning of platforms. Tectonic subsidence and basement morphology influence backstepping geometry and tilting of platforms over longer timescales)

Webster, J.M., L. Wallace, E. Silver, D. Potts, J.C. Braga, W. Renema, K. Coleman-Riker & C. Gallup (2004)- Coralgal composition of drowned carbonate platforms in the Huon Gulf, Papua New Guinea: implications for lowstand reef development and drowning. Marine Geology 204, p. 59-89.
(Coral, algae, larger forams facies models and development of Pleistocene carbonate platforms, Huon Gulf. Facies from shallow to deep: 1. Coral reef lst (reef flat-upper reef slope <20m; with Calcarina), 2. Coralline algal- foraminiferal nodule limestone, 3. Halimeda limestone (deep fore-reef slope ~20-60m; with Amphistegina, Heterostegina, Operculina), 4. Coralline algal- foraminiferal crust limestone (deeper fore-reef slope ~60-90m; with Amphistegina, Cycloclypeus, Heterostegina operculinoides, Operculina) and 5. Planktonic foraminifera limestone (with Amphistegina, Cycloclypeus, Heterostegina))

Whitehouse, F.W. (1973)- Coral reefs of the New Guinea Region. In: O.A. Jones & R. Endean (eds.) Biology and geology of coral reefs, 1, Academic Press, New York, p. 169-186.

Wichmann, C.E.A. (1912)- On the so-called atolls of the East-Indian Archipelago. Proc. Koninklijke Nederlandse Akademie van Wetenschappen, Amsterdam, 14, p. 698-711.
(online at: https://dwc.knaw.nl/DL/publications/PU00013229.pdf)
(Dutch version online at: https://www.delpher.nl/nl/boeken/view?identifier=MMKB31:036997000:00009)
(Review of distribution of modern coral reefs in Indonesia. Most are fringing reefs and patch reefs. True atolls or barrier reefs are absent or virtually so in the East Indies Archipelago)

Wienberg, C., H. Westphal, E. Kwoll & D. Hebbeln (2010)- An isolated carbonate knoll in the Timor Sea (Sahul Shelf, NW Australia): facies zonation and sediment composition. Facies 56, 2, p. 179-193.
(Facies and biota description of Pee Shoal in Timor Sea. Steep and flat-topped knoll. Facies zonation: (A) scarce sponges, hydrozoans and crinoids (320-210m water depth); (B) hardground outcrops (step-like banks, vertical cliffs) colonized by octocorals and sponges (210-75m); (C) summit region (75-21m) slopes merge gently into flat-topped summit, colonized by massive and encrusting corals and octocoral Heliopora. Sediments from summit dominated by Halimeda)

Wijsman-Best, M.B. (1977)- Coral research in the Indonesian Archipelago, the past, the present and the future. Marine Research in Indonesia 17, p. 1-14.
(online at: https://www.researchgate.net/publication/343550355_CORAL_RESEARCH_IN_THE_INDONESIAN_ARCHIPELAGO_THE_PAST_THE_PRESENT_AND_THE_FUTURE)
(Includes brief historical account of coral reef research in Indonesia before 1950 (incl. works by Molengraaff, Umbgrove, Niermeijer, Verweij, Kuenen, etc.))

Wilson, M.E.J. (2002)- Cenozoic carbonates in Southeast Asia: implications for equatorial carbonate development. Sedimentary Geology 147, p. 295-428.
(online at: www.academia.edu/download/39358644/Wilson_M._E._J.__Cenozoic_carbonates_in_Southeast_Asia_implications_for_equatorial_carbonate_development._Sedimentary_Geology_147_342015.pdf)
(Most comprehensive modern review of Tertiary carbonates in SE Asia)

Wilson, M.E.J. (2008)- Reservoir quality of Cenozoic carbonate buildups and coral reef terraces. Proc. 32nd Annual Conv. Indonesian Petroleum Association (IPA), Jakarta, IPA08-G-155, p. 1-8. *(online at: www.academia.edu/31155294/Reservoir_quality_of_Cenozoic_carbonate_buildups_and_coral_reef_terraces)*
(On ongoing research on modern carbonates of Wakatobi area, Tukang Besi Islands, SE of Buton/Sulawesi. Archipelago includes large atolls, smaller buildups and 4 main islands with modern rimmed shelves or fringing reefs. On islands >10 Pliocene- Quaternary coral reef terraces, uplifted to ~300m)

Wilson, M.E.J. (2008)- Global and regional influences on equatorial shallow-marine carbonates during the Cenozoic. Palaeogeogr. Palaeoclim. Palaeoecology 255, p. 262-274.
(online at: http://searg.rhul.ac.uk/pubs/wilson_2008%20Equatorial%20shallow-marine%20carbonates.pdf)
(Marked change from larger foram to coral-dominated carbonate producers around Oligo-Miocene boundary. Early Miocene acme of coral development in SE Asia)

Wilson, M.E.J. (2011)- SE Asian carbonates: tools for evaluating environmental and climatic change in the equatorial tropics over the last 50 million years. In: R. Hall, M.A. Cottam & M.E.J. Wilson (eds.) The SE Asian gateway: history and tectonics of Australia-Asia collision, Geological Society, London, Special Publ. 355, p. 347-369.
(online at: http://searg.rhul.ac.uk/pubs/wilson_2011%20SE%20Asian%20carbonates.pdf)
(Review of shallow water carbonate environmental and climatic changes through last 50 My in SE Asia)

Wilson, M.E.J. (2012)- Equatorial carbonates: an Earth systems approach. In: Carbonate platforms: archives of past global change, Sedimentology 59, 1, p. 1-31.
(Review of low-latitude carbonate systems, with examples from SE Asia)
online at: https://www.academia.edu/17164228/Equatorial_carbonates_an_earth_systems_approach)

Wilson, M.E.J. (2015)- Oligo-Miocene variability in carbonate producers and platforms of the Coral Triangle biodiversity hotspot; habitat mosaics and marine biodiversity. Palaios 30, 1, p. 150-168.
(Mainly review of Tertiary carbonates of Kutai Basin of E Kalimantan)

Wilson, M.E.J. & R. Hall (2010)- Tectonic influences on SE Asian carbonate systems and their reservoir development. In: W.A. Morgan, W.A. George et al. (eds.) Cenozoic carbonate systems of Australasia, Soc. Sedimentary Geology (SEPM), Special Publ. 95, p. 13-40.
(online at: https://www.researchgate.net/publication/229042787_Tectonic_Influences_on_SE_Asian_Carbonate_Systems_and_their_Reservoir_Development)
(Tectonics control location of SE Asian Cenozoic carbonate deposits. 70% of 250 shallow marine carbonate formations in SE Asia initiated as attached features, 90% of economic hydrocarbon discoveries developed over antecedent topography, of which >75% isolated platforms. Economic reservoirs mainly in backarc and rift-margin settings (40% each). Demise of many platforms influenced by tectonic subsidence, often in combination with eustatic sea-level rise and environmental perturbations. Fractures enhance reservoir quality or may cause compartmentalization of reservoirs through formation of fault gouge or fault leakage)

Wilson, M.E.J. & S.W. Lokier (2002)- Siliciclastic and volcaniclastic influences on equatorial carbonates: insights from the Neogene of Indonesia. Sedimentology 49, p. 583-601.
(online at: https://www.academia.edu/17164227/Siliciclastic_and_volcaniclastic_influences_on_equatorial_carbonates_insights_from_the_Neogene_of_Indonesia)
(Despite significant clastic influence, Neogene carbonates developed adjacent to major deltas or volcanic arcs, and are comparable with modern mixed carbonate-clastic deposits in region. Regional carbonate development in areas of high clastic input influenced by antecedent highs, changes in amounts or rates of clastic input, delta lobe switching or variations in volcanic activity, energy regimes and relative sea-level change. With examples from patch reef complexes in Miocene deposits of proto-Mahakam and Wonosari Platform, Java S Mountains)

Wilson, M.E.J. & B.R. Rosen (1998)- Implications of paucity of corals in the Paleogene of SE Asia: plate tectonics or center of origin? In: R. Hall & J.D. Holloway (eds.) Biogeography and geological evolution of SE Asia, Backhuys Publishers, Leiden, p. 165-195.
(online at: https://www.researchgate.net/publication/267260031_Implications_of_paucity_of_corals_in_the_Paleogene_of_SE_Asia_plate_tectonics_or_Centre_of_Origin)
(Corals generally rare in Eocene- Oligocene carbonates of SE Asia. Instead, dominated by larger foraminifera and coralline algae)

Wilson, M.E.J. & A. Vecsei (2005)- The apparent paradox of abundant foramol facies in low latitudes: their environmental significance and effect on platform development. Earth-Science Reviews 69, p. 133-168.
(Locally common Recent larger foram-rich carbonates at tropical latitudes in SE Asia and Australia)

Wizemann, A., T. Mann, A. Klicpera & H. Westphal (2015)- Microstructural analyses of sedimentary *Halimeda* segments from the Spermonde Archipelago (SW Sulawesi, Indonesia): a new indicator for sediment transport in tropical reef islands? Facies 61, 2, p. 1-18.

Yamano, H., G. Cabioch, B. Pelletier, C. Chevillon, H. Tachikawa, J. Lefevre et al. (2015)- Modern carbonate sedimentary facies on the outer shelf and slope around New Caledonia. Island Arc 24, p. 4-15.
(Encrusted grains facies (rhodoliths, macroids) generally distributed at depths of 75-200m and associated with Cycloclypeus carpenteri. Ahermatypic coral facies on cone-like mounds at depths of 240-520 m)

Yamano, H., H. Kayanne, F. Matsuda & Y. Tsuji (2002)- Lagoonal facies, ages, and sedimentation in three atolls in the Pacific. Marine Geology 185, 3-4, p. 233-247.
(Lagoons in atolls of Palau and Marshall islands 3 facies: Calcarina, Calcarina-Heterostegina and Heterostegina facies, based on presence/ absence of larger forams Calcarina (reef flat) and Heterostegina (deep lagoon). Calcarina facies allochthonous reef-derived materials, Heterostegina facies mainly in situ lagoonal materials)

Yamano, H., T. Miyajima & I. Koike (2000)- Importance of foraminifera for the formation and maintenance of a coral sand cay: Green Island, Australia. Coral Reefs 19, p. 51-58.
(Green Island Reef (Great Barrier Reef, Australia) sand cay major constituents benthic foraminifera (mainly Amphistegina lessonii, Baculogypsina sphaerulata, and Calcarina hispida), calcareous algae (Halimeda and coralline algae), hermatypic corals, and molluscs. Benthic foraminifera ~30% of total sediment)

Yi, L., Z. Jian, X. Liu, Y. Zhu, D. Zhang, Z. Wang & C. Deng (2018)- Astronomical tuning and magnetostratigraphy of Neogene biogenic reefs in Xisha Islands, South China Sea. Science Bulletin (China) 63, 9, p. 564-573.
(online at: https://www.sciengine.com/SB/doi/10.1016/j.scib.2018.04.001)
(Cyclostratigraphic and magnetostratigraphic study on Miocene-Pliocene reef buildup using XK-1 core, drilled at Shidao Island, Xisha (Paracel) Islands. Astronomical geochronology suggests that bottom ages for Ledong, Yinggehai, Huangliu, Meishan and Sanya Fms are 2.2 Ma, 5.7 Ma, 10.4 Ma, 16.6 Ma and 24.3 Ma. Earth's eccentricity and obliquity played dominant roles in biogenic reef growth)

Zaneveld, J.S. & H.Th. Verstappen (1952)- A recent investigation about the geomorphology and the flora of some coral islands in the Bay of Djakarta. J. Scientific Research 3, p. 58-68.
(First research of Bay of Jakarta coral reef islands since Umbgrove in 1927. Several rel. minor changes. With outline of modern floral zonation on coral islands (incl. marine algae and sea weeds)

Bibliography of Indonesian Geology